

OPEN UP THE DOORS!

AN LGBTI HANDBOOK FOR
HEALTHCARE PROFESSIONALS

OPEN UP THE DOORS!

AN LGBTI HANDBOOK FOR
HEALTHCARE PROFESSIONALS

OPEN UP THE DOORS!

AN LGBTI HANDBOOK FOR
HEALTHCARE PROFESSIONALS

Title: *Open up the doors! An LGBTI handbook for healthcare professionals*
Authors: **Dr. Zsuzsanna Szél, Dr. Zsófia Török**
Professional reviewed by:
Linguisting review: **Rita Béres-Deák, Luca Dudits**
Graphic design: **Zsolt S. Szabó**
Publisher: **Háttér Society**
Date: **January 2022**

ISBN: todo



This publication was produced as part of the project, Open Doors: Promoting Inclusive and Competent Health Care for LGBTI People, co-funded by the European Union’s Rights, Equality and Citizenship Programme (2014-2020).

The content of this publication represents the views of the authors only and is their sole responsibility. The European Commission does not accept any responsibility for use that may be made of the information it contains.



This publication may be downloaded free of charge from opendoors-project.eu.

The aim of this handbook

This publication is intended to support physicians, nurses, healthcare workers, psychologists, therapists, and social workers in their work with LGBTI clients and patients, with the aim of providing better care for sexual and gender minority individuals and improving the health status of the LGBTI population.

Increasing cultural competence by means of education is an essential part of reducing disparities in the healthcare system (Szél et al. 2020; Dunjić-Kostić et al. 2012; Banwari et al. 2015; Lopes, Gato and Esteves 2016; Grabovac et al. 2014). Several previous studies have confirmed that attitudes towards LGBTI individuals strongly correlate with knowledge about gender and sexual minorities. Overall, the health of LGBTI population is only marginally addressed in university education, students in many cases do not have the opportunity to access an adequate amount of information and inclusive training material without prejudice, stereotypes, and unconscious biases.

This handbook was written with an LGBTI affirmative approach, after carefully reviewing the currently available literature on the topic of LGBTI health needs and health status and revising the accessible recommendations on providing culturally competent care for these minorities. The aim of this handbook is to provide summarised, clear, and useful information for educators, students, and people working in the health and social care system. We intended to review the similarities and differences of LGBTI groups across a broad spectrum and to draw the attention of caregivers and healthcare professionals to specific questions of working with LGBTI individuals.

We hope that the handbook will help to create a more inclusive health and social care system, thereby helping to reduce disparities in care.

References

- Banwari, G., Mistry K., Soni, A., Parikh, N., & Gandhi, H. (2015). Medical students and interns' knowledge about and attitude towards homosexuality. *Journal of Postgraduate Medicine*, 61(2), 95–100. <https://doi.org/10.4103/0022-3859.153103>
- Dunjić-Kostić, B., Pantović, M., Vuković, V., Randjelović, D., Totić-Poznanović, S., Damjanović, A., Jašović-Gašić, M., & Ivković, M. (2012). Knowledge: A Possible Tool in Shaping Medical Professionals' Attitudes towards Homosexuality. *Psychiatria Danubina*, 24(2), 143–151.
- Grabovac, I., Abramovic, M., Komlenovic, G., Milosevic, M., & Mustajbegovic, J. (2014). Attitudes towards and knowledge about homosexuality among medical students in Zagreb. *Collegium Antropologicum*, 38, 39–45.
- Lopes, L., Gato, J., & Esteves, M. (2016). Portuguese Medical Students' Knowledge and Attitudes Towards Homosexuality. *Acta Médica Portuguesa*, 29(11), 684–693. <https://doi.org/10.20344/amp.8009>
- Szél, Zs., Kiss, D., Török, Zs., & Gyarmathy, V. A. (2020). Hungarian Medical Students' Knowledge About and Attitude Toward Homosexual, Bisexual, and Transsexual Individuals. *Journal of Homosexuality*, 67(10), 1429–1446. <https://doi.org/10.1080/00918369.2019.1600898>

Table of contents

CHAPTER 1. — INTRODUCTION	17
1.1) KEY EXPRESSIONS / TERMINOLOGY	17
1.1.1) Sex, gender identity and gender expression	17
1.1.1.a) Sex	17
1.1.1.b) Gender	18
1.1.1.c) Trans umbrella	19
1.1.1.d) Intersex	20
1.1.2) Sexual orientation	21
1.1.2.a) Emotional and sexual attraction	21
1.1.2.b) Sexual experience (MSM, WSW)	22
1.1.2.c) Sexual/romantic affection (with no identification or experience)	22
1.1.3) Other expressions related to the topic	22
1.1.4) Examples	23
1.2) ABOUT THE STIGMA AND BARRIERS TO ACCESS HEALTHCARE IN GENERAL	24
1.2.1) Stigma and stigmatisation	24
1.2.2) Barriers to access healthcare	26
1.2.2.a) Employment, working and living conditions	26
1.2.2.b) Accessibility	27
1.2.2.c) Communication	28
1.2.2.d) Lack of information or knowledge	28
1.3) MINORITY STRESS, DISCRIMINATION	29
1.4) CULTURAL COMPETENCE IN MEDICAL SETTINGS	32
1.5) INTERSECTIONALITY	33
1.6) COMING OUT PROCESS	35
REFERENCES	38

CHAPTER 2. — HEALTH STATUS	47
2.1) MENTAL HEALTH	47
2.1.1) Introduction	
2.1.2) General problems affecting the whole spectrum	48
<i>2.1.2.a) Mental health problems: Major depression, bipolar disorder, and generalised anxiety disorder</i>	48
<i>2.1.2.b) Suicide and self-harm</i>	49
2.1.3.) Problems affecting specific groups	50
<i>2.1.3.a) Gay and bisexual men</i>	50
<i>2.1.3.b) Lesbian and bisexual women</i>	51
<i>2.1.3.c) Trans people</i>	51
<i>2.1.3.d) Intersex people</i>	52
2.1.4.) Conversion therapy	52
2.2) PHYSICAL HEALTH	53
2.2.1) Introduction	53
2.2.2) Physical health problems affecting the whole spectrum	53
2.2.3) Physical health problems affecting specific groups	55
<i>2.2.3.a) Lesbian and bisexual women</i>	55
<i>2.2.3.b) Gay and bisexual men</i>	56
<i>2.2.3.c) Trans people</i>	56
<i>2.2.3.d) Intersex people</i>	56
2.3) HEALTH BEHAVIOUR AND SOCIAL ENVIRONMENT	58
2.3.1) Smoking	58
2.3.2) Addictions: alcohol and substance misuse	58
2.3.3) Physical activity and sleep quality	60
2.3.4) Eating- and diet related disorders	60
2.3.5) Screening participation	60
2.3.6) Intimate partner violence	61
2.3.7) Homelessness	62
REFERENCES	63
CHAPTER 3. — HEALTH NEEDS	
3.1) MENTAL HEALTH NEEDS	73
3.1.1) Resilience, self-acceptance, and positive identity	73
3.2) PHYSICAL HEALTH NEEDS	75
3.2.1) Prevention: screening and vaccination	75
3.2.2) Screening in primary healthcare settings	75
<i>3.2.2.a) Breast and cervical cancer screening for lesbian and bisexual women</i>	75
<i>3.2.2.b) Colorectal cancer screening</i>	76
<i>3.2.2.c) Prostate cancer screening for gay and bisexual men</i>	76
<i>3.2.2.d) Cancer screening for transgender individuals</i>	76
<i>3.2.2.e) STI screening</i>	77
3.3) SEXUAL HEALTH	78
3.3.1) Prevention of HIV infection and STIs	79
<i>3.3.1.a) Screening</i>	79
<i>3.3.1.b) Relative risk of sexual practices</i>	79
<i>3.3.1.c) Preventive measures</i>	80

<i>3.3.1.d) Bioprophylaxis</i>	80
3.3.2) Reproductive issues	80
3.4) HEALTH RISKS (ADDICTION HELP, SOCIAL SUPPORT)	82
3.5) SYNDEMIC THEORY	83
REFERENCES	84

CHAPTER 4. — ESTABLISHING INCLUSIVE HEALTHCARE	
WHAT SHOULD WE DO?	93
4.1) GENERAL ISSUES	93
4.1.1) Institutional level – creating safe places	93
<i>4.1.1.a) Anti-discrimination and inclusive health policies</i>	93
<i>4.1.1.b) Multicultural and diverse environment</i>	94
<i>4.1.1.c) Other considerations</i>	95
4.1.2) Personal level – the use of language, implicit and explicit attitudes	96
<i>4.1.2.a) A self-reflexion tool</i>	96
<i>4.1.2.b) General anamnesis (questions for effective and accepting patient-doctor communication)</i>	97
<i>4.1.2.c) Physical examination</i>	99
<i>4.1.2.d) Incorrect assumptions</i>	100
<i>4.1.2.e) Pronouns and preferred expressions</i>	101
<i>4.1.2.f) Avoiding unnecessary or discriminative questions</i>	102
4.2) SPECIFIC ISSUES	104
4.2.1) Internal medicine	104
<i>4.2.1.a) Recommendation for providers</i>	105
<i>4.2.1.b) Screening and intervention in primary healthcare settings</i>	105
<i>4.2.1.c) LGBTI-specific interventions</i>	106
4.2.2) Oncology	106
<i>4.2.2.a) Anal cancer</i>	106
<i>4.2.2.b) Breast cancer</i>	107
<i>4.2.2.c) Cervical Cancer</i>	107
<i>4.2.2.d) Colon and Rectal Cancer</i>	108
<i>4.2.2.e) Prostate Cancer</i>	108
<i>4.2.2.f) Endometrial Cancer</i>	109
<i>4.2.2.g) HIV associated cancers</i>	109
4.2.3) Psychiatry	109
<i>4.2.3.a) Depression, anxiety, and psychological distress</i>	110
<i>4.2.3.b) Suicide and self-harm</i>	111
<i>4.2.3.c) Substance use, alcohol misuse and smoking</i>	112
<i>4.2.3.d) Body image concerns and eating disorders</i>	114
4.2.4.) Surgery	115
<i>4.2.4.a) Introduction</i>	115
<i>4.2.4.b) On the surgeries themselves:</i>	116
4.2.5.) Pharmacology	119
<i>4.2.5.a) Hormone therapy options for transgender women (male to female, MTF)</i>	119
<i>4.2.5.b) Puberty blockers</i>	121
<i>4.2.5.c) Hormone replacement therapy for intersex people</i>	122
<i>4.2.5.d) Risks and side effects of hormone therapies</i>	123

4.2.6) Sexually transmitted diseases	124
<i>4.2.6.a) HIV and acquired immunodeficiency syndrome (AIDS)</i>	124
<i>4.2.6.b) Human papillomavirus (HPV) infection</i>	125
<i>4.2.6.c) Hepatitis A Virus infection</i>	125
<i>4.2.6.d) Hepatitis B Virus infection</i>	126
<i>4.2.6.e) Hepatitis C Virus infection</i>	126
<i>4.2.6.f) Anogenital herpes infection</i>	126
<i>4.2.6.g) Gonorrhoea (gonococcal infection)</i>	127
<i>4.2.6.h) Syphilis</i>	127
<i>4.2.6.i) Chlamydial genital infection</i>	128
REFERENCES	129

CHAPTER 5. — SPECIAL ISSUES	141
5.1) GROUP SPECIFICATIONS	141
5.1.1.) Transgender-specific health issues	141
<i>5.1.1.a) Mental health in general</i>	141
<i>5.1.1.b) Mental health of transgender youth</i>	142
<i>5.1.1.c) Adult trans individuals</i>	143
<i>5.1.1.d) Caring for trans elderly</i>	146
5.1.2.) Intersex-specific health issues	146
<i>5.1.2.a) Mental health</i>	147
<i>5.1.2.b) Physical health</i>	148
5.1.3) Specific health issues of bisexual individuals	153
5.1.4) The health of homosexually experienced heterosexual persons	154
5.2) AGE-SPECIFICATIONS	156
5.2.1) LGBTI youth	156
<i>5.2.1.a) Stages of adolescence</i>	156
<i>5.2.1.b) Caring for LGBTI adolescents</i>	157
<i>5.2.1.c) Patient interview with LGBTI adolescents</i>	157
<i>5.2.1.d) Sexual health</i>	158
<i>5.2.1.e) Mental health</i>	158
<i>5.2.1.f) Smoking, alcohol and substance use</i>	159
<i>5.2.1.g) Safety, violence, victimisation</i>	160
<i>5.1.2.h) Physical examination, screening and immunisation</i>	160
5.2.2.) LGBTI seniors	161
<i>5.2.2.a) Physical health</i>	161
<i>5.2.2.b) Sexual health</i>	162
<i>5.2.2.c) Mental health</i>	162
5.3) OTHER SPECIFICATIONS	164
5.3.1) Family (rainbow families, families with LGBTI children)	164
<i>5.3.1.a) LGBTI parenting</i>	164
<i>5.3.1.b) Forming a rainbow family</i>	164
5.3.2) Intersectionality	165
5.3.3) Domestic violence/intimate partner violence	166
5.3.4) Homelessness	169
REFERENCES	171

CHAPTER 6. — LOCAL SPECIFICATIONS	185
HELPFUL RESOURCES	187
APPENDIX	189

Chapter 1. – Introduction

1.1) Key expressions / terminology

1.1.1) Sex, gender identity and gender expression

1.1.1.a) Sex

In general terms, “sex” refers to biological, social, and legal classification based on a combination of bodily characteristics, including chromosomes, hormones, internal and external genitals, and secondary sex characteristics. It usually divides people into only two mutually exclusive (binary) normative categories (male and female). People whose biological sex cannot be classified as either male or female can be classified as intersex; however, they may identify as intersex people, male, female, trans, non-binary or other.

Sex characteristics are the sets of biological, genetic, hormonal characteristics which are used to differentiate sexes or typify someone’s sex.

Primary sex characteristics usually refer to gonadal sex (although in some other cases authors might differentiate primary sex characteristics from gonadal sex), those characteristics that are usually present at birth: the external and internal genitalia. This includes testes, epididymides,

seminal vesicles, prostate and duct systems in males and vulva (labia minor and major), clitoris, vagina, cervix, uterus, fallopian tubes, and ovaries in case of females (Schonfeld, 1943; Ditmar, 2011; Richards and Hawley, 2011).

Primary sex characteristics are usually not independent from the genetic constellation of someone’s chromosomes (the most common are XY, and XX, some of the most frequent other settings of sex chromosomes are: 45, X (Turner syndrome); 47, XXY (Klinefelter syndrome); 47, XYY (XYY syndrome, supermale syndrome); and 47, XXX (triple X syndrome, superfemale syndrome) (Bacino, 2019).

Secondary sex characteristics or somatic sex refers to other characteristics, which usually develop during puberty established by the secretion of hormones, such as change in voice, growth of hair in the pubic area and on other body parts, the enlargement of external genitals, development of muscles and bones, emotional maturation (Ditmar, 2010; Richards and Hawley, 2011, Herman-Giddens et al. 2012). These changes subside by early adulthood and are also subjected to great variation.

In the literature two more levels of sexual characteristics can be distinguished: **tertiary sex characteristics** (these usually refer to normative gender roles: masculinity and femininity, sexual behaviour, and performance), and often **quaternary sexual characteristics** (the expected social activities which connected to certain sex or gender) (Tyl 2014; Weininger, 2005). The postmodern, poststructuralist model of gendered bodies and embodied gender also draws attention to the performativity of gender, gender roles, and expected (gender) behaviour (see later). It also investigates the experience of (embodied) gender in terms of embodied (inner and outer) genitals and the discursive effect of visible gender traits. Some expressions and categorisations used in the general medical discourse are old-fashioned, excluding and distressing for many LGBTI individuals (Fausto-Sterling, 2019; Heinämaa, 2012; Nayak and Kehily 2006).

1.1.1.b) Gender

The term of gender “refers to the socially constructed set of expectations, behaviours and activities of women (femininity) and men (masculinity) which are attributed to them on the basis of their sex” (Jurčić 2020). Gender is considered as a social construct created in a dynamic relation that implies norms and power relations of inequalities between men and women, and affected by historical, cultural, and social impacts (Fenway Institute, 2016, 2020; APA 2010, 2015; ILGA Europe, 2015; CFCA, 2019; Heinämaa, 2012; Jansen and Wehrle, 2018; Woodward, 2020).

Gender identity – refers to a personal experience of gender to which people feel they belong, which may or may not be consistent with the sex they were assigned at birth (ILGA Europe 2015; APA 2010, 2015; Fenway Institute 2016, 2020; CFCA, 2019).

Cisgender individuals have a gender identity that matches the sex they were assigned at birth (e.g.,

a person assigned female at birth and who identifies as a woman), in other cases one’s gender does not line up with the assigned gender at birth (e.g., trans people) (Fenway Institute 2016, 2020; Jurčić, 2020).

Cisgender – a person who identifies with the sex assigned at birth, whose gender identity is in accordance with social expectations regarding biological, mental, or social features, who is not trans (APA 2011, 2015; CFCA, 2019; Fenway Institute, 2016, 2020; Jurčić, 2020).

Transgender (abbreviated as trans) – refers to individuals whose gender identity is different from the sex assigned at birth. It can also include those whose gender identity is outside the gender binary (female/male; woman/man) for example, people who are gender fluid, pangender, non-binary or genderqueer (APA 2011, 2015; CFCA, 2019; Fenway Institute, 2016, 2020, ILGA Europe, 2015; Tompkins, 2014; Jurčić, 2020).

Gender expression – Refers to someone’s behaviour, mannerisms, clothing, make up, hair style, speech, with the aim of expressing one’s sense of belonging to a gender. It may or may not correlate with gender identity nor assigned sex at birth (APA 2011, 2015; CFCA, 2019; Fenway Institute, 2016, 2020, ILGA Europe, 2015).

Gender incongruence – WPATH’s (World Professional Association for Transgender Health) 7th edition of Standards of Care for the Health of Transsexual, Transgender, and Gender-Nonconforming People define gender incongruence as a “discomfort or distress that is caused by a discrepancy between a person’s gender identity and that person’s sex assigned at birth” in some cases the discrepancy is reaching such level of distress that they meet the diagnostic criteria of DSM 5, American Psychiatric Association definition of gender incongruence: „marked difference between the individual’s expressed/experienced gender and the gender others would assign them for at least six months period” (Matevossian, Vve-

densky and Kulishm 2008; WPATH – SOC7, 2012). The debate about the term "gender dysphoria/incongruence" and its necessity as a medical diagnosis is still in progress between the medical profession and the trans community, while Arlene Istar Lev (who has decades of experience in therapeutic work with trans people) argues that keeping “Gender Dysphoria in the DSM ensures that transgender people will continue to be labeled with a mental illness for decades to come” (Lev, 2013). She also argues an important view about trans people in her article on DSM V.: “their gender is not disordered; indeed, their gender is quite ordered, just not in conventional ways” (Lev, 2013). That sentence would be worth considering if we strive to be a culturally competent provider, and we also must have a close look on our present (medical and general) practice.

1.1.1.c) Trans umbrella

The “trans umbrella” covers a diverse group of individuals whose gender identity or expression (masculine, feminine, other) does not meet the social assumptions and expectations regarding their sex (male, female) assigned at birth (APA, 2011, 2015).

Transgender (abbreviated as trans) – refers to individuals whose gender identity is different from the one assigned at birth, it can also include those whose gender identity are outside the gender binary (female/male; woman/man) for example, people who are gender fluid, pangender, non-binary or genderqueer (APA 2011, 2015; CFCA, 2019; Fenway Institute, 2016, 2020, ILGA Europe, 2015; Tompkins, 2014).

Trans man (transgender man) is a person who was assigned female at birth and identifies as male (other expressions, like female-to-male, FTM, AFAB – assigned female at birth, transmasculine, might also be used in informal settings with respect and caution) (APA 2015, Fenway Institute, 2016, 2020).

Trans woman (transgender woman) is a person who was assigned male at birth and identifies as female (other expressions, like male-to-female, MTF, AMAB – assigned male at birth, or transfeminine, might also be used in informal settings with respect and caution) (APA 2015, Fenway Institute, 2016, 2020).

Gender binary – the idea that there are only two genders, male and female, and that a person must strictly fit into one category or the other (APA, 2015; Fenway Institute, 2016, 2020).

Some people have gender identities outside the gender binary structure of girl/woman and boy/man, these include:

Gender variant – term often used by the medical community for individuals who are gender non-conforming, gender diverse, whose clothing, behaviour, or gender expression does not conform to the traditional expectations (ILGA Europe, 2016).

Non-binary – term used for a person whose gender identity is outside of the traditional gender binary structure of female/woman and male/man (APA, 2015; Fenway Institute, 2020, CFCA, 2019).

Gender fluid – a person whose gender identity may change. Gender fluid people may constantly or intermittently feel like a mix of the two traditional genders or other genders, or one gender some days, and another gender other days (APA, 2015; Fenway Institute, 2016, 2020).

Genderqueer – a person who does not identify within the gender binary, someone who does not want to identify oneself with any gender categories. They usually identify in non-normative ways, and do not adjust to either male or female role expectations (APA, 2015; Fenway Institute, 2016, 2020).

Two-spirit – a person filling one of the many mixed-gender roles current in Native American

communities, having both a masculine and a feminine spirit, taking on the identities and roles of both sexes (Indian Health Service, 2020; Filice, 2020).

Agender – a person who identifies with none of the genders (Fenway Institute, 2016, 2020).

Pangender – a person who identifies with all genders (Fenway Institute, 2016, 2020).

Some other key terms related to trans people:

Pronouns – Pronouns are the words we use when we are referring to another person without using their name. Some languages – like the English – have gender-specific personal pronouns (e.g., she/her/hers, he/him/his, and they/them/theirs – also for singular form) (APA, 2015; CFCA, 2019; Fenway Institute, 2020). If your language uses gender-specific pronouns, it is advisable to ask people what pronouns use to be able to use pronouns properly/inclusively.

Misgendering – To refer to someone by an incorrect pronoun or other gendered term (e.g., Ms./Mr./Mx.) (CFCA, 2019; Fenway Institute, 2020).

Chosen Name/Name Used – It is the name someone chooses to use in personal communication, sometimes it is different from the legal name (Fenway Institute, 2020).

Dead name – a name that a trans person was called by, the one that belonged to their sex assigned at birth, a name which they no longer use or feel comfortable with. Calling someone by their dead name is rude and harmful and can be endangering in public. It is important to notice that deadnaming is also a way of discrimina-

tion, humiliation and microaggression (Fenway Institute, 2020).

1.1.1.d) Intersex

Intersex is also an umbrella term. It describes people who are born with physical characteristics in which the reproductive organs, genitals, and/or other sexual anatomy does not align for the expected binary female or male sex characteristics (APA 2015; CFCA, 2019; Fenway Institute, 2016, 2020, ILGA Europe, 2015).

In medical terms intersex usually refers to congenital conditions of someone having both male and female sex characteristics, or neither male nor female. However congenital sexual diversity might include the diversity of sex chromosomes, sex hormones and can result in various anatomic structure of internal and external genitalia which may not fit typical binary notions of social or medical normalities. Intersex people have a sexual anatomy that does not fit the typical binary notions of “female/male”, hence, of “masculine” and “feminine” body (Jurčić, 2020).

The clinical classification uses “Disorders/Differences of Sex Development” (DSD) to describe this condition (Bouman et al. 2010) (formerly the terms hermaphrodite and pseudo-hermaphrodite were used in the medical community; however, they are insulting for the intersex community, therefore intersex activists have rejected the term "hermaphrodite". Meanwhile, efforts to reappropriate the term are ongoing within the community just like in the case of other expressions in connection with LGBTI issues e.g., queer or dyke) (APA, 2015; Fenway Institute, 2016, 2020, ISNA 2008).

1.1.2) Sexual orientation

1.1.2.a) Emotional and sexual attraction

Sexual orientation describes a pattern of emotional and sexual attraction to people of a particular gender, or to people regardless of their gender (Fenway Institute, 2016, 2020; ILGA Europe, 2015; CFCA, 2019; Jurčić, 2020).

Modern approaches no longer portray sexual orientation as a dichotomy, but rather as a spectrum or continuum (e.g., heterosexuality, homosexuality, asexuality and polysexuality). Sexual orientation can vary over the course of someone’s life and/or in different situations, but it cannot be changed purposely.

Asexual – is an umbrella term describing a spectrum of identities: demisexual, lithosexual, fraysexual etc. Some asexual people still have a libido and might experience sexual desire, but they do not experience constant sexual attraction. They might also experience romantic attraction to others (belonging to one or multiple genders) (Fenway Institute, 2016, 2020).

Bisexual – identity or orientation that describes a person who is emotionally and sexually attracted to people of the same and the opposite sex (Fenway Institute, 2016, 2020; ILGA Europe, 2015; CFCA, 2019).

Demisexual – identity or orientation that describes a person on the asexual spectrum, who experiences sexual attraction only under specific circumstances (e.g., after building an emotional/romantic relationship with others) (UNC, 2020).

Gay – identity or orientation that describes a person who is emotionally and sexually attracted to people of their own gender. It is more commonly used to describe men who are attracted to men (Fenway Institute, 2016, 2020; ILGA Europe, 2015; CFCA, 2019).

Heterosexual – (straight) a sexual orientation that describes people, who are emotionally and sexually attracted to the opposite sex. People who self-identify as heterosexual may occasionally have sex with people of the same sex, but do not identify as homosexual, gay, lesbian, or bisexual (Fenway Institute, 2016, 2020; ILGA Europe, 2015; CFCA, 2019).

Homosexual – a term for sexual orientation, rooted in the fields of medicine and psychology, which describes individuals who are emotionally and sexually attracted to the same sex. People who self-identify as homosexual, gay or lesbian may occasionally have sex with people of a different sex, but do not identify as heterosexual or bisexual (Makadon et al. 2015; ILGA Europe 2015).

Lesbian – identity or orientation which describes a woman who is emotionally and sexually attracted to other women (Fenway Institute, 2016, 2020; ILGA Europe, 2015; CFCA, 2019).

Pansexual – identity or orientation that describes a person who can experience sexual, romantic, or emotional attraction to any person, regardless of that individual’s sex, gender, or sexuality (Fenway Institute, 2016, 2020; CFCA, 2019).

Polysexual – identity or orientation that describes a person who is attracted sexually or emotionally to people with varying genders. Polysexual orientations include bisexuality, pansexuality, and queer, among many other sexualities.

Queer – As an umbrella term that describes people who aren’t exclusively heterosexual. The term queer also admits that sexuality is a spectrum rather than a collection of different categories. This term earlier possessed negative and derogatory connotations, but nowadays queer was reclaimed by the LGBTI community as a common and socially acceptable expression, or an umbrella term referring themselves and their community, although due to the negative history of the term, it should be used carefully and

respectfully (APA 2015, Fenway Institute, 2016, 2020; ILGA Europe, 2015; CFCA, 2019). The term “queer” is also in use within the LGBTI community in order to mitigate homonormativity and enhances acceptance and support of diversity among the members of the community (Duggan, 2002; Grant and Nash, 2020).

1.1.2.b) Sexual experience (MSM, WSW)

MSM and WSW usually refer to sexual activity. These terms were traditionally used in public health discourse on STDs and are challenged by LGBTI activists because they focus on normative sexual practices and make some non-normative sexualities invisible. It is also important to notice that sexual activity, sexual attraction, or sexual behaviour may not be parallel with sexual orientation or identity.

MSM refers to men having sex with men, while **WSW** to women having sex with women.

MSMW refers to men having sex with both men and women, and **WSWM** refers to women having sex with both men and women (Fenway Institute, 2016, 2020).

It is important to take notice both of sexual orientation and sexual activity or experience, because some studies suggest that heterosexual MSM and WSW individuals may be characterised by worse health status than their LGB counterparts (Lhomond et al. 2013; Caceres et al. 2018; Mays et al. 2018; Patterson and Jabson, 2018).

1.1.2.c) Sexual/romantic affection (with no identification or experience)

Some people experience romantic affection, but don’t experience sexual attraction. The experience of having a romantic desire toward others (of one or more genders) does not necessarily involve sexual affection, relationship, or interaction.

Some people experience sexual affection toward one or more genders but do not necessarily engage in sexual intercourse or relationships (Makadon et al. 2015).

1.1.3) Other expressions related to the topic

Minority stress – chronic distress faced by members of stigmatised minority groups, such as sexual and gender minority people. It is provoked by distal stressors (objective external threats, discrimination, or expectations of such events), and proximal stressors (internalised negative attitudes, or concealment of sexual orientation or gender identity) (Meyer, 2003; Fenway 2020).

Intersectionality – a framework which argues that a person can be characterised by overlapping identities such as race, class, ethnicity, sexuality/sexual orientation, gender/gender identity, physical disability, national origin, religion, age, and other social or physical attributes, which are mutually constructed, interdependent and effect people’s experiences and the forms of discrimination (Makadon et al. 2015; Carastathis, 2014; Dill and Kohlman, 2012).

Cultural competence – is a set of knowledge, awareness, sensitivity and humility which establishes the ability to participate ethically and effectively in personal and professional intercultural interactions (National LGBTI Health Alliance, 2013; Makadon et al. 2015).

Coming out – refers to the process of identifying and accepting one’s own sexual orientation or gender identity (coming out to oneself), and the act of disclosing one’s sexual orientation or gender identity to others (coming out to friends, family, etc.) (Fenway Institute, 2016, 2020; ILGA Europe, 2015).

Medicalisation – means when something (or someone), is being defined as a medical issue (illness, disorder or deviant), being taken over by the medical elite and therefore being referred to in medical terms or medical interventions are being used in order to treat it/them (Higgs, 2018; Liebert, 2014).

Outing – disclosing another person’s sexual orientation or gender identity unwantedly or without the person's consent (Fenway Institute, 2016, 2020).

Pathologisation – it refers to the process when an experience is seen and approached as a (psychological or physiological) problem. It is also often used as a synonym of “medicalisation” (Liebert, 2014).

Patient-centred care – is a clinical approach which emphasises the person behind the patient, respects patient autonomy, responses to their needs, seeks cooperation and alliance between the patient and the provider (Myfanwy, 2018).

Informed consent – is one of the most important requirements of providing patient-centred care. It is the voluntary and fully informed and competent decision of the patient to undergo any treatment, test, or examination. Consent must be given freely after being fully informed about one’s diagnosis (when known), the expected development of the condition with and without treatment, the nature, risks, benefits and side effects of the test/examination/intervention/treatment/surgical procedure; the treatment alternatives and their risks and benefits, any material risks. Information must be provided on the proper level and language. Patient should be involved in a dialogue/conversation where the provider assesses the patient's understanding and provides an opportunity for the patient to ask questions.

Trauma-informed care – is a clinical treatment approach which is defined as practices that

highlight understanding, recognizing, and responding to the effects of all types of trauma, and promote a culture of safety, empowerment, and healing (Fenway Institute, 2020).

1.1.4) Examples

Adrina identifies as a woman. She is emotionally and sexually attracted to other women and identifies as a lesbian. Adrina is a lesbian.

Tadek identifies as a trans man. He is sexually and emotionally attracted to people of the same gender, but also to other people of other genders. Tadek is a bisexual man.

Zoltan identifies as a man. His gender identity is male. At birth, Zoltan was assigned as a female. Zoltan has not gone through medical gender re-assignment. Zoltan is a trans man.

Theodore identifies as male. His sex assigned at birth is male. He has sex with men and women. Theodor identifies as heterosexual. Theodor is a cis heterosexual man.

Maria identifies as female, while she was born with an assigned male sex. Maria had her gender reassigned both medically and legally. Maria is a trans woman.

Oscar identifies as a man. He was assigned a male sex at birth. Oscar is cisgender.

Max identifies as non-binary. They were assigned a female sex at birth, but they do not identify as female nor male. Max is non-binary.

Andrea was assigned as and raised as female. They found out as a teenager that they have XY chromosomes and an intersex variation. They do not identify as female nor male. Andrea is intersex.

1.2) About the stigma and barriers to access healthcare in general

Health inequities based on sexual orientation and gender are well-known and pervasive issues in modern healthcare. LGBT people might face several barriers when trying to access care, there are legal obstacles to health insurance or socioeconomic barriers in some countries, and providers receive little or no training in connection with LGBT individuals, and hence can offer no culturally competent care for them (McKay 2011; Institute of Medicine 2011). In addition to these, previous experiences and expectations of implicit or explicit discrimination during the utilisation of the healthcare system also marginalise sexual and gender minority individuals, hence the experience of discrimination or stigmatisation delays seeking care, and vice versa: higher levels of disclosure are associated with greater healthcare utilisation (Casagrande et al 2007; Whitehead Shaver and Stephenson 2016; Puhl and Heuer 2007).

1.2.1) Stigma and stigmatisation

Link and Phelan (2001) define stigma as “the co-occurrence of its components–labelling, stereotyping, separation, status loss, and discrimination”, and Herek (2007) specifies it as “the negative regard, inferior status, and the relative powerlessness that society collectively accords to any non-heterosexual or non-cisnormative behaviour, identity, relationship, or community”.

In the case of sexual and gender minorities, society’s negative attitude to people (including their

identity, relationship, or group identity) that are non-heterosexual or not cisgender, is called “LGBTI stigma”.

Stigma can be experienced “explicitly,” when someone criticises or rejects the other (e.g., LGBTI people or People of Colour) in an open, conscious, controllable, and reflective way, or implicitly, when someone is not aware of their bias and is unintentionally insensitive or rude toward others.

The sense of stigmatisation affects health in multiple ways:

Firstly, implicit or explicit stigmatisation, or adverse experiences in healthcare settings might lead to avoidance of healthcare utilisation, due to the uncertainty about whether future providers will know how to treat them appropriately. When patients feel stigmatised, they are more likely not to disclose their sexual orientation or gender identity toward their providers, or delay seeking help, which impairs the effectiveness of the physician-patient encounter, and affects patient cooperation and compliance, thus affecting the therapeutic efficacy itself (Durso and Meyer 2013).

Secondly, stigmatisation and internalised negative attitudes have an adverse effect on mental and physical health, might result in higher level of anxiety or distress, more frequent occurrence of depression, suicidal thoughts or suicide attempts, elevated risk for unhealthy behaviors / coping strategies which might affect general

health and health outcomes (such as smoking, alcohol or drug usage¹ (Goldbach et al. 2014; Feinstein and Newcomb, 2016; Parent et al. 2018), and several chronic diseases such as cardiovascular diseases, diabetes or certain tumours.

LGBTI individuals may face microaggressions and victimisation because of their minority status on a daily basis, which increases their risk for engaging in unhealthy coping strategies in order to handle the increased mental burden (Goldbach et al. 2014; Feinstein and Newcomb, 2016; Parent et al. 2018).

We must highlight that sexual and gender minorities are more likely to experience traumatic events than the average population through bullying, microaggressions, stigmatisation, hate crimes and also historical or social traumas (Roberts, Austin, Corliss, Vandermorris and Koenen, 2010; Beckerman and Auerbach, 2014; Livingston, Berke, Scholl, Ruben and Shipherd 2020; Bovin, Camden and Weathers, 2021). Therefore, when working with LGBTI individuals, healthcare professionals should be aware of PTSD (post-traumatic stress disorder) signs/symptoms such as: 1) re-experiencing the traumatic event (intrusive memories, flashbacks, and/or nightmares); 2) avoidance of traumatic reminders, 3) a persistent sense of threat, evidenced by hypervigilance and increased startle (Livingston, Berke, Scholl, Ruben and Shipherd 2020; Beckerman and Auerbach, 2014). It is important to keep in mind that though some LGBTI patients may not meet the diagnostic criteria of PTSD or CPTSD, they are still more likely to experience serious mental suffer on the ground of stigmatisation, internalised LGBTI-phobia, rejection sensitiv-

ity, hostility, marginalisation, discrimination and victimisation than the general population (Roberts, Austin, Corliss, Vandermorris and Koenen, 2010).

We can distinguish stigma occurring on different levels:

Social – structural level

Social/public stigma – the disapproval of, or discrimination against, someone on basis of perceived characteristics that separate the person or group from others in society (based on culture, religion, gender, sexual orientation, race/ethnicity, intelligence, health/illness or disability, socioeconomic status). E.g.: widespread prejudices that gay man are feminine or that they cannot maintain a monogamous relationship.

Structural stigma – societal or institutional conditions, laws, policies, and practices that reduce the opportunities, resources, power, or well-being of people with certain characteristics or group identities. E.g.: denying same-sex partners access to marriage, lack of culturally competent health providers or health policies which would provide equal services for cisgender, heterosexual and sexual or gender minority individuals.

Interpersonal – intrapersonal level

Anticipated stigma is the belief or concern for possible future instance of prejudice, stereotyping or discrimination, which can cause someone to avoid or delay accessing healthcare settings.

1 Substance use and misuse was conceptualised in several ways during the last few decades from total prohibition and pathologisation through harm reduction to poststructuralist, more critical perceptions including the agency of the user and the role of the society and its narratives (D’Agord and Canabarro, 2012; Sills, 2017; Bright, 2014).

Internalised stigma is the devaluation of the self, based on cultural or social norms, beliefs and values about sexual orientation or gender identity or other minority status. It can cause lower self-esteem, and it might increase the potential for participation in negative health behaviours.

Perceived or felt stigma is the awareness of stereotypes or feelings of shame or insecurity due to any identity or characteristics. It leads to the fear of stigmatisation, and results in anxiety and ostracisation.

Enacted stigma is the overt and actual act of humiliation, discrimination, harassment, and violence directed toward someone.

The importance of public stigmas lies in the fact that they evoke implicit negative attitudes, which means that they build up a powerful barrier to providing help to stigmatised individuals, meanwhile self-stigma can induce a sense of shame, fear of stigmatisation or being blamed which might raise another barrier to seeking help (Fortenberry, McFarlane, Bleakley, Bull, Fishbein, Grimley, Malotte, and Stoner, 2002).

Stigmatisation in connection with sexual orientation and gender identity in healthcare settings can occur as:

Heteronormativity – the assumption that everyone is heterosexual, or that only heterosexuality is “normal”. Also refers to societal pressure for everyone to look and act in a stereotypically heterosexual way. Heteronormativity can manifest as heterosexism, the biased belief that heterosexuality is superior to all other sexualities.

Cisnormativity – the assumption that everyone is cisgender, or that only cis gender identity is “normal.”

Heteronormativity and cisnormativity imbue the discourse of the healthcare system, the definitions of the diagnoses and determinate clinical

practice in general.

Transphobia – humiliation, marginalisation, discrimination, hatred or abuse of transgender people or a person assumed to have a trans identity.

Biphobia – humiliation, marginalisation, discrimination, hatred or abuse of bisexual individuals, or someone assumed to be bisexual. Bisexual people often face the undermining of the legitimacy of their identity in both LGBTI and majority communities and sometimes they are assumed to be heterosexual or gay based on the gender of their current partner.

Homophobia – humiliation, marginalisation, discrimination, hatred or abuse of gay or lesbian individuals, or someone assumed to be gay or lesbian.

Intersexphobia – humiliation, marginalisation, discrimination, hatred or abuse of intersex individuals or someone who assumed to be intersex.

Enbyphobia – humiliation, marginalisation, discrimination, hatred or abuse of non-binary individuals, or someone assumed to be non-binary.

1.2.2) Barriers to access healthcare

1.2.2.a) Employment, working and living conditions

According to some previous studies, sexual and gender minority individuals’ households have less income and are more likely to live under the poverty line – bisexual and lesbian women, and trans people especially (Mallory and Sears, 2015; Fric, 2019; Sears and Mallory, 2011; Cahill and Tobias, 2007; Reisner et al. 2015; Lambda Legal, 2010; Schneebaum and Badgett, 2019).

LGBTI people are also more likely to be facing homelessness and unemployment (Cochran et al, 2002; Corliss et al. 2011; Rosario, Schrimshaw and Hunter 2012; Durso and Gates, 2012; Laurent and Mihoubi, 2017; Charlton, Gordon and Reisner, 2018). Research on employment within LGBTI population indicates that sexual and gender minority individuals feel less safe at their workplace, they experience discrimination, mobbing or bullying more often and they also find it harder to get employed or change jobs; furthermore, they tend to take jobs below their skills and level of education (Ozeren 2014; Cech and Rothwell, 2020; Ng and Rumens, 2017; Rudin, Biling, Farro and Yang, 2020)

Isolation/abandonment and the lack of supportive family relationships likewise are important barriers, which contribute to their higher risk for homelessness, and the lack of financial support or available relatives who would take care of them if needed. The problem of isolation is more acute in the case of young and elderly LGBTI individuals. Youth are more exposed to the dangers while being dependent on parental care, and/or are economically dependent on their legal guardians. Similarly, the elderly become vulnerable when they are no longer able to live independently and must move into communal care homes, therefore specific services for vulnerable age groups would be desirable (especially in the field of pediatric care, the social care system, nursing homes and the primary care system).

1.2.2.b) Accessibility

Accessibility of the healthcare system or services is also inequitable on many levels (McKay 2011). Firstly, LGBTI individuals and their families are less likely to have private health insurance due to the lack of access to employer-sponsored health insurance; or the bias in recognition/acknowledgment of their family relations or partnership/marriage (Clift and Kirby 2012; Grant et al 2011).

There are some studies that highlight that certain subpopulations of the LGBTI community are more likely to be underserved by delay in getting or obtaining prescribed medicine. In addition, they are also more likely to experience a delay in getting adequate care because healthcare providers refuse to provide them healthcare or because they postpone seeking care due to previous experiences or stigmatisation (**LGBT refusal facts sheet 2015**; James et al 2016). LGBTI individuals are also more likely to use the emergency room (Sanchez et al. 2007; James et al. 2016). Finally, previous studies indicate that sexual and gender minority individuals are more likely to be harassed by healthcare providers. Prejudicial, stigmatizing, and discriminatory behaviour adopted by health personnel leads to impairment and inequity in accessing the health system for the sexual and gender minority population. The most common discriminatory or prejudicial behaviours of healthcare professionals experienced by the members of the LGBTI community were the following (NWLC, 2014; **LGBT refusal facts sheet 2015**; Grant et al. 2011; Faix-Prukner and Rózsa 2015; Hidasi 2014): healthcare professionals, nurses, doctors, etc.:

- refused to touch them or used excessive precautions.
- humiliated them or used harsh or abusive language.
- misgendered or deadnamed them.
- refused to take notice of their family relations (e.g., same-sex partner).
- blamed them for their own health status/illness.
- denied care or referral because of their sexual orientation or gender identity.
- were physically rough or abusive with them.
- expressed unhealthy curiosity, asked questions unrelated to the specific health issue they come with, understated (or minimised) their complaints.
- unnecessarily segregated them.

1.2.2.c) Communication

Communication is a basic element of a provider-patient encounter. Problems in communication seriously affect caregiving by jeopardising the establishment of a correct diagnosis, interfering with a patient's intention to ask questions, and therefore the opportunity to give and take informed consent. In addition, it deteriorates the patient's compliance and hinders building a trustful doctor-patient relationship.

Patients need to understand their diagnoses, treatment options and alternatives, its risks and benefits, and also the prognosis of their condition in order to give informed consent. Practitioners' own discomfort and unease whilst addressing sexual orientation and gender identity – often rooted in the uncertainty about the usage of affirmative language or correct terminology – can also be considered as a communication barrier, and can easily result in unintentional rudeness, or inappropriate and intimate curiosi-

ty/behaviour on the part of the health personnel (Sharek et al 2015; Fish and Bewley 2010).

1.2.2.d) Lack of information or knowledge

The shortage of healthcare providers who are knowledgeable about LGBTI health issues, as well as health professionals' own feeling of unpreparedness to address health needs of sexual and gender identity affects their therapeutic decisions and narrows their ability to take care of LGBTI individuals by creating a feeling of incompetence and frustration (Sharek et al 2015; Fish and Bewley 2010). Heteronormativity, cis-normativity and lack of information on specific health risks, mental and physical health needs of LGBTI community results in biased treatment and LGBTI patients become ill-served or underserved in healthcare environments (e.g., the difficulty of being up-to-date with routine screenings or examinations).

1.3) Minority stress, discrimination

Meyer's minority stress model suggests that because of distal (such as stigma, prejudice and discrimination) and proximal factors (expectation of discrimination or rejection; internalised negative social attitudes), LGBTI people may experience chronically high levels of stress (Meyer 2003; Dentato 2012). The presence of unique (homophobia, biphobia, transphobia, enbyphobia and intersexphobia) chronic (lifetime of harassment, maltreatment, discrimination), socially based (hostile, heteronormative, cisnormative culture) stressors results in the disproportionate experience of distress, which threatens minority individuals' physical and mental health (DeLilly and Flaskerud 2012; McConnell et al. 2018; Williams et al. 2019). When compared to the majority group (cisgender and/or heterosexual population), LGBTI minorities are usually characterised by less favorable mental health outcomes; these results suggest that minority stress processes are related to poorer physical health and numerous mental health issues such as anxiety disorders, depressive symptoms, maladaptive coping (excessive drinking, smoking, substance use), and suicide ideation (Frost, Lehavot and Meyer 2015; Meyer and Frost 2013; Kelleher, 2009).

Sexual and gender minorities perceive a variety of stressors that are common to other minorities (discrimination, stereotypes, hate crimes), but internalised homophobia and the stress caused by the concealment of their (minority) identity appear as specific additional stressors in their lives (Hatzenbuehler and Pachankis 2016; Meyer 2003). Sources of stress such as experiences of prejudice, expectations of rejection, concealment, alienation, and internalised homophobia demand the individual to adapt by the excessive usage of mental and physical supplies, which affects physical and mental health outcomes (Hatzenbuehler 2009, Pascoe and Smart Richman, 2009).

Relying on Lazarus and Folkman's stress conceptualisations, Meyer distinguishes between distal and proximal stressors (Folkman and Lazarus 1988; Meyer 2003; Meyer and Frost 2013). He describes stressors as a continuum from external, objectively stressful chronic and acute events and conditions (such as experiencing discrimination or hate crime), through expectations of such events and alertness to this expectation (fear of stigma or rejection), to the internalised homonegativity (the internalisation of negative societal attitudes). In the case of LGBT individuals, a fourth stressor must be mentioned, the vigilance related to the concealment of sexual orientation or gender identity, and the inner tension in relation to actively hiding their group identity (Meyer 2003). Meyer attaches equal importance to the psychological effects of both proximal and distal factors based on the idea that distal societal attitudes and stress factors became proximal by the cognitive appraisal and gain psychological importance.

Anti-gay violence, hate crime and discrimination are core stressors which affect sexual and gender minority individuals (Garnets 1990; Herek and Berrill 1990; Huebner, Rebhook, and Kegeles 2004; Kertzner et al. 1999). Homophobic prejudice, as one of the distal stressors, is present on a societal and institutional level and through human history in the form of cisnormative and heteronormative culture (as discriminatory laws punishing same-sex activities with imprisonment, or the extermination of gay people in the Nazi empire), which stigmatises and subordinates LGBTI individuals (Herek 2007).

With the sexual revolution, as a result of feminism and pro-gay movements, LGBTI individuals became more visible, which resulted in more prominence and group support for the community, although visibility had an unexpected adverse effect: sexual and gender minorities became

more identifiable targets for harassment, violence and discrimination. The experience of victimisation, bullying, harassment, and violence interferes with the individual's sensation of the ordinary course of life, destroys the survivor's feeling of security and invulnerability, the survivor's attempts to dissolve the dissonance in order to give meaning to their experiences might lead to self-devaluation and the formation of a negative self-schema. Mental or physical abuse has severe health-damaging effects by provoking a variety of symptoms, such as sleeping disorders, headaches, diarrhoea, uncontrollable crying, anxiety, agitation and restlessness or depression, might result in addictions, and the devaluation of human relationships, therefore increasing isolation. Stigmatisation of LGBTI individuals also provokes alienation, lack of integration into society, a lower level of social support and has an adverse effect on the person's self-acceptance by forming negative self-schemas. In their daily interactions, just like other minorities, LGBTI individuals experience microaggressions and discrimination, and they learn to expect negative reactions and views from those belonging to the dominant culture, and to maintain their vigilance (Nadal et al. 2016).

The perceived stigma and threat results in constant alertness, therefore the vigilance is chronic, for it is repeatedly induced in intergroup interactions by the members of the dominant culture. Meyer quotes Crocker who describes this phenomenon as “need to be constantly ‘on guard’ ... alert, or mindful of the possibility that the other person is prejudiced” (p. 517 (Meyer 2003)). Perceived social stigma threatens the self-image of a minority person; as their self-image might not harmonise with what is conveyed / expected by the dominant group, this provokes an unstable or vulnerable self-perception and results in minority individuals using enormous energies to maintain and restore positive self-image (Kelleher 2009).

Proximal factors include the expectation of rejection, self-stigmatisation or internalised homonegativity and concealment. The expectation of rejection is rooted in experienced heterosexism, cisnormativity and perceived social stigmatisation, and causes severe and chronic stress, therefore it is an important predictor of poor psychological wellbeing and impaired social functioning. The internalisation of negative societal attitudes, beliefs, and stereotypes into one's self-image results in self-stigmatisation, which jeopardises the opportunity of social support, negatively affects intimate relationships and may cause sexual dysfunction. Internalised homophobia seriously affects mental and physical health by lowering self-esteem, disturbing pursuit of positive self-image and by modifying behaviour (e.g., increases engaging in risk behaviour). Concealment is applied by various minorities as a coping strategy to avoid attacks against an individual's minority identity. The concealment of sexual orientation or gender identity requires constant vigilance and attention from LGBTI individuals, during which they must evaluate and re-evaluate their environment, interactions on and on, and must be constantly aware of their own speech, behaviour, clothing, what to share or not to share about themselves. Meanwhile, they must continuously read the verbal and non-verbal reactions of the other party to refine their communication.

Some LGBTI people cope skillfully with their threatened identity on the individual, interpersonal and community level, and they also use several positive active (e.g., seeking support – on a personal level; negativism – on a group level) and passive (e.g., avoidance – on a personal level; passing – on a group level) coping strategies as well (Breakwell 1986; Seelman et al. 2017). The positive sense of LGBTI identity, resistance to cultural norms, seeking for social or affirmative support (e.g., on the internet or at gay-friendly and/or transinclusive services and bars/cafes), spirituality and engaging in health promoting

behaviors all have a positive effect on LGBTI people's mental and physical health (McDavitt 2008; Seelman et al. 2017; Toomey 2018; Puckett 2020). Having supporting friends as a family of choice can also be a very successful coping strategy for many LGBTI individuals, notably for those whose birth families are dismissive or LGBTIphobic, so they can rely on friends for emotional (or even financial) support if they are in need (McDavitt et al. 2008; Drabble et al. 2018). These relationships can be especially important for those age groups which are more dependent on others (e.g., the youth and the elderly, see in more detail in Chapter 5.2. Age-specific factors). Defying or deconstructing normative expectations (cis/heterosexism) and engaging in activism are also effective and helpful coping methods of sexual and gender minorities (McDavitt 2008; Toomey et al. 2018; Puckett et al. 2020). Drabble and colleagues also mention emotional connectedness with pets as a successful coping method of sexual minority women (Drabble et al. 2018).

Nonetheless as consequence of negative societal attitudes / LGBTIphobia, in order to prevent discrimination, harassment or abuse, LGBTI individuals may have to conceal their minority status and give up certain activities, avoid their peers, and refrain from attending some events, which results in more pervasive isolation and losing important social resources which would

help them to cope in favorable way and build a positive (minority) identity.

The decision whether or not to come out requires a careful evaluation of the circumstances and consequences each time, as the stakes are the exposure to discrimination or rejection and the preservation of self-integrity.

While concealment and suppression have negative effects on general health, disclosure and expressing one's SOGIE (Sexual Orientation, Gender Identity and Expression) reduce anxiety in a supportive and accepting environment (McConnell et al. 2018).

To better describe how the exact mechanisms work which redound to stressors related to prejudice and discrimination and eventually affect mental health, we should take a look at Hatzenbuehler's study on the psychological mediation framework (Hatzenbuehler, 2009). The minority stress model lacks an important aspect of the effect of stigma-related stress: it remains unclear how it affects mental and physical health on the intra- and interpersonal level, how discrimination and stigma-related stress get under the skin, and how it should be targeted with the aim of providing better/more supportive healthcare services for the LGBTI population (Keuroghlian, Ard and Makadon, 2017).

1.4) Cultural competence in medical settings

Cultural competence was introduced in the US in the 1980s as a framework which promotes respect for cultural diversity and difference. Its basis is the respect of diversity and multiculturalism in terms of values and belief systems, social group membership, social power, social class, heterogeneity of attitudes, various customs and lifestyles (Foronda et al. 2016; Butler et al. 2011). Creating a culturally competent health-care system which is sensitive to the needs of LGBTI individuals and provides them inclusive and affirming care is essential in order to diminish health inequity. Cultural competence can be described as a continuum from cultural superiority toward cultural proficiency (Sue 2001).

The levels of cultural competence can be described the following way (Sue 2001; Dupre and Goodgold 2007; Substance Abuse and Mental Health Services Administration (US); 2014):

“Cultural destructiveness”: the lowest level, it means that a person or a system sees other cultures as inferior and denies that cultural differences should be addressed with the aim of equity.

“Cultural incapacity”: the second stage, in this case the person or the system is aware of cultural differences but is still ignorant of and holds an unrealistic fear toward minorities and practices a paternalistic approach.

“Cultural blindness”: the midpoint, it means that a person or system explicitly denies superiority but believes that culture or group membership make no difference and that all people are the same and all needs can be universally addressed. Cultural blindness ignores cultural strengths and weaknesses, it encourages equality instead of equity, and often leads to blaming the survivor for their problems. As moving to the more positive stages of the continuum, the more sensitive and competent the system or the individual becomes.

“Cultural pre-competence”: on this level the provider / the system understands and respects cultural differences, beliefs and values, sees the weaknesses in serving minorities and makes efforts to improve services, but holds unconscious biases.

“Cultural competence”: this level is achieved by the system and professionals respecting differences and practicing constant self-assessment regarding beliefs, assumptions and norms. Cultural competency also requires a continuous development of knowledge and resources in order to best serve each minority.

“Cultural proficiency”: one of the most desirable levels, it means that a person/system sees and honors the differences among cultures, values diversity, and interacts respectfully with a variety of cultural groups. Culturally proficient providers serve as role models and play an active role in sensitizing others.

Some critique of the cultural competence continuum argues that the most desired state of cultural competency is not cultural proficiency but **cultural humility** (Ortega and Coulborn 2011; Tervalon and Murray-Garcia 1998; Foronda et al. 2016; Tascón and Gatwiri 2020).

“Cultural humility”: is about being aware of power imbalances and accepting our limitations, viewing others as real experts of their culture and showing willingness to learn from them. Practicing cultural humility constitutes a lifelong process with the aim of increasing our self-awareness to perceive and put aside our biases (Tervalon and Murray-Garcia 1998; Foronda et al 2016). Applying cultural humility means that we are willing to interact with another person and accept and honor their beliefs, customs, and values.

1.5) Intersectionality

Intersectionality argues that social identities are mutually constructed and interdependent, they are not created in social vacuums, but affected by social power relations and reflect the system of oppression and privileges. Intersectionality originates from the Black feminist movement, which highlights that the dual minority situation of black women made them stay invisible for the racial movement because of their gender, meanwhile their racial identity caused them to be left out from the feminist movement (Collins, 2000; Crenshaw, 1991; Carastathis, 2014, Dill and Kohlman 2012).

Physicians should always be aware of their position during doctor-patient encounters, no matter whether they are representing the dominant culture or belong to minorities, because due to their specific knowledge and social status they possess the privilege of the clinical gaze, which creates a power imbalance. Caring for minority patients always requires extra carefulness and consideration no matter which minority group the patients belong to.

Any identity formation can cause stress for the patients, therefore intersectionality theory, the idea of multiple identities and the presence and maintenance of inequities on a systematic level, are important issues in connection with health-care and health outcomes (Arnold, Rebhook and Kegeles, 2014; Whitehead, Shaver and Stephenson, 2016; Cahill et al, 2017). Positive identity formation is essential for wellbeing, therefore, physicians and health professionals must be aware of the potential ranges of identities and the challenging milieu which is created in the cross-section of these unique, but parallel identities.

Individuals belonging to sexual minorities are exposed to discrimination and prejudices to a different extent. For instance, Black people

reported that they experienced discrimination based on sexual orientation more frequently (Meyer 2003). Research also suggests that LGB youth and the elderly are even more likely to face antigay prejudice and are more vulnerable to the adverse psychological effects of victimisation and harassment. The results described above also confirm that using intersectionality theory can help us to understand how multiple social identities such as ethnicity, race, gender, sexual orientation, gender, gender identity, socioeconomic status (SES), disability, etc. mediate the effects of prejudices between the micro-level of one’s experience in their everyday life and the macro-level of social structures. Intersectionality theory provides an important point of view for understanding minority individuals’ experiences of multiple marginalisation and its relationship to their well-being and health outcomes (McConnell et al. 2018). LGBTI people of colour, the youth, the elderly and the disabled, on the one hand, struggle with social prejudices based on their gender identity and sexual orientation, and on the other hand become stigmatised within the SGM group due to racism, ageism and ableism. Some studies found that LGB people of colour reported high levels of stress and severe identity compartmentalisation due to experiencing both racism and heterosexism, which suggests elevated risk for adverse health outcomes (Bridges, Selvidge and Matthews 2003; Meyer 2003; McConnell et al. 2018; Ghabrial 2017, Balsam et al. 2011). Meanwhile, others found that LGBTI people of colour show higher resilience despite the greater minority stress exposure, which indicates that their early experiences of racism might help them to develop resilience and to understand and cope with their sexual or gender identity (Balsam et al. 2015; Kertzner et al. 2009; Mustanski, Garofalo and Emerson 2010). This suggests a positive intersectionality which means that (self-)acceptance and empowerment of one social identity can support other aspects

of identity and increase resilience and wellbeing (Ghabrial 2017). Meanwhile, negative experiences (e.g., racial/ethnic, age stigma) within the LGBT community may adversely impact racial (or other) minorities' connectedness with

the LGBT communities and deprive them of the opportunities for an intimate relationship, peer support, and benefit from community resilience (McConnell et al. 2018).

1.6) Coming out process

Coming out refers to the process of identifying and accepting one's own sexual orientation or gender identity (coming out to oneself), and the act of disclosing one's sexual orientation or gender identity to others (coming out to friends, family, etc.). The coming out process appears to play a crucial role in the health and well-being of LGBTI individuals (Brotman, Ryan and Cormier 2003; Brotman et al. 2007). Coming out in the context of receiving healthcare is difficult, but in some cases necessary in order to get a proper examination and treatment which targets specific health needs and to support or facilitate LGBTI individuals to take part in routine medical examinations and screenings. The act of coming out is not a one-time event, but rather a lifelong process, which recurs: LGBTI individuals must come out again and again during their lives (e.g., whenever they begin in a new workplace, or acquire new acquaintances etc.).

The coming out process is extremely stressful because of the fear of rejection (from close relationships or in work life particularly) and because of isolation, alienation, and loneliness. In many cases, a period of "data" and experience collection, experimentation, and careful screening of environmental reactions precedes the act of coming out, and the majority of LGBTI individuals come out to a friend or another trusted individual before coming out to the wider circles of contacts/relations (Fergusson, Hoorwood and Beutrais 1999; Herrell et al. 1999; Hegna and Wichstrøm 2007). Friends and family, but even teachers or health providers can have a crucial role in supporting LGBTI people as they come out and provide a protective and secure environment to cope with specific LGBTI stress factors.

Several models exist to describe the process of coming-out, to define and understand the intention of increasing adaptiveness of the individual in adjusting their sexual orientation or gender

identity to a heteronormative and cisnormative society where LGBTI identities are stigmatised. Previous studies suggest that 'coming out' usually occurs in adolescence (from the age of 12 to the age of 17) during the highly sensitive period of puberty, when social, emotional and vocational development progresses, although some individuals discover their orientation or gender identity during early childhood, or in adulthood. This also means that some people become aware of their sexual orientation before engaging in any sexual behaviour, while in other cases, sexual experiences precede the establishment of sexual orientation, or sexual exploration takes place in order to clarify sexual orientation. Same-sex attraction or same-sex experiences during adolescence do not automatically indicate non-heterosexual orientation (Fergusson, Hoorwood and Beutrais 1999; Herrell et al. 1999; Safren and Heimberg 1999; Hegna and Wichstrøm 2007). However, it is also important to notice that sexual orientation can become completely clear at a younger age, and that adults cause severe stress for sexual and gender minority youth by viewing non-heterosexual orientations as a phase. We should also highlight that individuals experience their sexuality and gender in a social and historical context, where they are usually exposed to a dominant cisheteronormative discourse (Fauto-Sterling, 2019).

Coming out is influenced by one's characteristics (ethnic, racial, cultural, social, educational, regional background), actual life situation, personal history and experiences (victimisation, prejudices) and the perceived familial or social values which all can hinder or support the process. Health professionals and most importantly mental health professionals could play an important role in one's journey of coming out by supporting patients/clients who identify or are beginning to identify as LGBTI. When clients or patients are confused about their sexual orienta-

tion or gender identity, health professionals have an even more crucial role in providing support through open and trusting relationships. Providers who are negligent, who have unconscious biases or negative attitudes toward LGBTI people have an enormous negative effect on LGBTI health; by destroying self-esteem, redounding risky health behaviour and demolishing intentions of seeking help.

Gender and sexual orientation used to be conceptualised as dichotomous and unidimensional characteristics, but the components of sexual orientation and gender identity are more complex and rather multidimensional. The first and best-known conceptualisation of the sexual orientation spectrum was created by Kinsey, who distinguished 7 phases of sexual orientation on a continuum from exclusively heterosexual to exclusively homosexual. Advanced theories perceive gender identity and sexual orientation as multidimensional continuums, and beyond dichotomy. People usually have diverse and multifaceted identities, which can be described by using multidimensional models. One can possess both masculine and feminine qualities or neither of them, and that stands for gender roles and behaviour too. Multidimensionality in the context of sexual orientation means that people can have different levels of attraction to any genders parallelly. It is important to notice that whether the patient has sex with men, women, neither or both, the self-conceptualisation of their sexual orientation is always valid and accurate. We must also highlight that it is necessary and recommended to use the same words and expressions when describing or mentioning a person's sexual orientation or gender identity which the person themselves uses or prefers. If we turn openly, flexibly and supportively to our patients, we can establish a supporting and positive patient-provider relationship. Providers need to be informed about the stages and theories of the coming-out process in order to support their patients effectively.

Early coming-out theories are based on Elisabeth Kübler-Ross' grief model and other life crisis models (Makadon et al. 2015; Martin 1991; Coleman 1982). They suggested that LGB people go through the stages of shock, denial, anger, sadness, negotiation and acceptance on their way toward self-acceptance. In these theories sexual orientation identity initiates as an unconscious sense of being weird or different and moves towards a greater consciousness. In these models, LGBTI individuals move in a straight line from a starting point toward an endpoint, which is found when the positive self-image and openness are fully developed.

Later theories criticise the early coming out model because it pictures coming out as a linear, one-way, continuous upward curve with a definite endpoint (Morris 1997; Makadon et al. 2015). According to more modern concepts, coming out is a creative, circular and complex process with crossroads, back-flips and halts. Coming out can be re-lived over and over again in each and every life stage, change or situation and might result in a redefinition of identity. LGBTI identities are subject to a number of varied challenges and coming out can be conceptualised as a lifelong process, often progressing in several parallel levels (one can be out to one's family but not in a school setting, or out to one friend, but not to another, etc.). Revaluation of the choice of coming out takes place in one's life over and over again in many life situations; and sexual and gender minority individuals try to make the right decision regarding whether or not to come out by weighing its costs and benefits, under the burden of shame, self-loathing, pursuit of security and identity integration.

Bisexual persons often find the coming out procedure even more cumbersome because they can experience their sexual orientation as a struggle between two separate worlds. They are often assumed to be straight when dating someone of the opposite sex and assumed to be gay when having a same-sex partner. In order to repel these as-

sumptions, they might need to come out repeatedly several times in the same situations or to the same individuals, which can be very burdensome, meanwhile they may "pass as straight" and experience privileges when having an opposite sex partner / heterosexual relationship.

Coming out as a trans is no less challenging of a task. It involves not just expressing one's own feelings, senses, and desires regarding one's own gender, but applying changes in one's look, roles, behaviours or in some cases in physical appearance (hormonal or anatomical level). Several models have tried to describe the process of gender identification in case of non-cisgender individuals, one of these is Lev's model on coming-out process which describes identification

in six stages: (1) awareness; (2) seeking information/reaching out; (3) disclosure to significant others; (4) exploration, identity, and self-labeling; (5) exploration, transition issues, and possible body modification; (6) and integration, acceptance, and post transition issues (McBee 2013).

Some trans people are more capable to stay in the closet due to passing (their appearance fits into hetero- and cis-normative gender representations, therefore their gender is read as they wish to be in a cisnormative, usually binary context). Other trans people have severe challenges with coming out because they experiment a lot with their appearance and gender expression before settling on (if) any gender identity.

References

- American Psychological Association. (2015). Guidelines for psychological practice with transgender and gender nonconforming people. *American Psychologist*, 70(9), 832–864. <https://doi.org/10.1037/0039906>
- American Psychological Association. (2016). *Answers to your Questions About Transgender People, Gender Identity and Gender Expression*. <https://www.apa.org/topics/lgbt/transgender.pdf>
- Arnold, E. A., Rebchook, G. M., & Kegeles, S. M. (2014). ‘Triply cursed’: racism, homophobia and HIV-related stigma are barriers to regular HIV testing, treatment adherence and disclosure among young Black gay men. *Culture, Health & Sexuality*, 16(6), 710–722. <https://doi.org/10.1080/13691058.2014.905706>
- Australian Institute of Family Studies. (2019). *CFCA Resource Sheet. LGBTIQ+ communities - Glossary of common terms*. <https://aifs.gov.au/cfca/publications/lgbtiq-communities>
- Bacino, C. A. (2011). *Sex chromosome abnormalities*. <https://www.uptodate.com/contents/sex-chromosome-abnormalities>
- Balsam, K. F., Molina, Y., Beadnell, B., Simoni, J., & Walters, K. (2011). Measuring multiple minority stress: the LGBT People of Color Microaggressions Scale. *Cultural diversity & ethnic minority psychology*, 17(2), 163–174. <https://doi.org/10.1037/a0023244>
- Balsam, K. F., Molina, Y., Blayney, J. A., Dillworth, T., Zimmerman, L., & Kaysen, D. (2015). Racial/ethnic differences in identity and mental health outcomes among young sexual minority women. *Cultural Diversity and Ethnic Minority Psychology*, 21(3), 380–390. <https://doi.org/10.1037/a0038680>
- Beckerman, N. L., & Auerbach, C. (2014). PTSD as aftermath for bullied LGBT adolescents: The case for comprehensive assessment. *Social Work in Mental Health*, 12(3), 195–211. <https://doi.org/10.1080/15332985.2014.888026>
- Bouman W. P., Bauer, G. R., Richards, C., & Coleman, E. (2010). World Professional Association for Transgender Health Consensus Statement on Considerations of the Role of Distress (Criterion D) in the DSM Diagnosis of Gender Identity Disorder. *International Journal of Transgenderism*, 12(2), 100–106. <https://doi.org/15532739.2010.513927>
- Bovin, M. J., Camden, A. A., & Weathers F. W. (2021). Literature on DSM-5 and ICD-11: An Update. *PTSD Research Quarterly*, 32(2). https://www.ptsd.va.gov/publications/rq_docs/V32N2.pdf
- Bridges, S. K., Selvidge, M. M. D., & Matthews, C. R. (2003). Lesbian Women of Color: Therapeutic Issues and Challenges. *Journal of Multicultural Counseling and Development*, 31(2), 113–130. <https://doi.org/10.1002/j.2161-1912.2003.tb00537.x>
- Bright, S. J. (2014). *Dominant discourses and narratives of substance use: the development of a psychometric measure of internalisation*. [Doctoral dissertation, Curtin University]. <https://espace.curtin.edu.au/handle/20.500.11937/752>
- Brotman, S., Ryan, B., Collins, S., Chamberland, L., Cormier, R., Julien, D., Meyer, E., Peterkin, A., Richard, B. (2007). Coming Out to Care: Caregivers of Gay and Lesbian Seniors in Canada. *The Gerontologist*, 47(4), 490–503. <https://doi.org/10.1093/geront/47.4.490>
- Brotman, S., Ryan, B., & Cormier, R. (2003). The Health and Social Service Needs of Gay and Lesbian Elders and Their Families in Canada. *The Gerontologist*, 43(2), 192–202. <https://doi.org/10.1093/geront/43.2.192>
- Butler, P. D., Swift, M., Kothari, S., Nazeeri-Simmons, I., Friel, C. M., Longaker, M. T., & Britt, L. D. (2011). Integrating cultural competency and humility training into clinical clerkships: surgery as a model. *Journal of Surgical Education*, 68(3), 222–30. <https://doi.org/10.1016/j.jsurg.2011.01.002>

- Caceres B. A., Brody A. A., Halkitis P. N., Dorsen C., Yu G., & Chyun D. A. (2018). Sexual Orientation Differences in Modifiable Risk Factors for Cardiovascular Disease and Cardiovascular Disease Diagnoses in Men. *LGBT Health*, 5(5), 284–294. <https://doi.org/10.1089/lgbt.2017.0220>
- Cahill, S., Taylor, S. W., Elsesser, S. A., Mena, L., Hickson, D., & Mayer, K. H. (2017). Stigma, medical mistrust, and perceived racism may affect PrEP awareness and uptake in black compared to white gay and bisexual men in Jackson, Mississippi and Boston, Massachusetts. *AIDS Care*, 29(11), 1351–1358. <https://doi.org/10.1080/09540121.2017.1300633>
- Cahill, S., & Tobias, S. (2007). *Policy Issues Affecting Lesbian, Gay, Bisexual and Transgender Families*. University of Michigan Press.
- Carastathis, A. (2014). The Concept of Intersectionality in Feminist Theory. *Philosophy Compass*, 9(5), 304–314. <https://doi.org/10.1111/phc3.12129>
- Casagrande, S. S., Gary, T. L., LaVeist, T. A., Gaskin, D. J., & Cooper, L. A. (2007). Perceived discrimination and adherence to medical care in a racially integrated community. *Journal of General Internal Medicine*, 22(3), 389–395. <https://doi.org/10.1007/s11606-006-0057-4>
- Cech, E. A., & Rothwell, W. R. (2020). LGBT Workplace Inequality in the Federal Workforce: Intersectional Processes, Organizational Contexts, and Turnover Considerations. *ILR Review*, 73(1), 25–60. <https://doi.org/10.1177/0019793919843508>
- Center for Substance Abuse Treatment (US). (2014). *Improving Cultural Competence. Substance Abuse and Mental Health Services Administration. Treatment Improvement Protocol (TIP) Series*, 59(1), Introduction to Cultural Competence. <https://www.ncbi.nlm.nih.gov/books/NBK248431> (Exhibit 1–2)
- Charlton, B. M., Gordon, A. R., Reisner, S. L., Sarda, V., Samnaliev, M., & Austin, S. B. (2018). Sexual orientation-related disparities in employment, health insurance, healthcare access and health-related quality of life: a cohort study of US male and female adolescents and young adults. *BMJ Open*, 8(6), e020418. <https://doi.org/10.1136/bmjopen-2017-020418>
- Clift, J. B., & Kirby, J. (2012). Healthcare access and perceptions of provider care among individuals in same-sex couples: findings from the Medical Expenditure Panel Survey (MEPS). *Journal of Homosexuality*, 59(6), 839–850. <https://doi.org/10.1080/00918369.2012.694766>
- Cochran, B. N., Stewart, A. J., Ginzler, J. A., & Cauce, A. M. (2002). Challenges faced by homeless sexual minorities: comparison of gay, lesbian, bisexual, and transgender homeless adolescents with their heterosexual counterparts. *American Journal of Public Health*, 92(5), 773–777. <https://doi.org/10.2105/ajph.92.5.773>
- Coleman, E. (1982). Developmental Stages of the Coming-Out Process. *American Behavioral Scientist*, 25(4), 469–482. <https://doi.org/10.1177/000276482025004009>
- Collins, P.H. (2000). *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment*. Routledge.
- Corliss, H. L., Goodenow, C. S., Nichols, L., & Austin, S. B. (2011). High burden of homelessness among sexual-minority adolescents: findings from a representative Massachusetts high school sample. *American Journal of Public Health*, 101(9), 1683–1689. <https://doi.org/10.2105/AJPH.2011.300155>
- Crenshaw, K. (1991). Mapping the Margins: Intersectionality, Identity, and Violence Against Women of Color. *Stanford Law Review*, 43(6), 1241–1300. <https://doi.org/10.2307/1229039>
- D’Agord, M., & Canabarro, R. D. C. (2012). Drug Addiction and Social Discourses. *Revista Latinoamericana de Psicopatologia Fundamental*, 15(3), 482–496. <https://doi.org/10.1590/S1415-47142012000300003>
- DeLilly, C. R., & Flaskerud, J. H. (2012). Discrimination and health outcomes. *Issues in mental health nursing*, 33(11), 801–804. <https://doi.org/10.3109/01612840.2012.671442>
- Dentato, M.P. (2012). The minority stress perspective. *Psychology & AIDS Exchange*, 37, 12–15. <https://www.apa.org/pi/aids/resources/exchange/2012/04/minority-stress>

■ Dill, B., & Kohlman, M. (2012). Intersectionality: a transformative paradigm in feminist theory and social justice. In S. Nagy Hesse-Biber (Ed.), *Handbook of feminist research: Theory and praxis* (pp. 154–174). SAGE.

■ Ditmar, M. F. (2011). Chapter 1: Adolescent Medicine. In A. P. Richard A.P., & M. F. Ditmar, *Pediatric Secrets* (5th ed., pp. 8–42). Mosby.

■ Drabble, L., Trocki, K., Salcedo, B., Morales, B. R., & Korcha, R. A. (2018). Strengths and coping strategies in the life narratives of sexual minority women. *Journal of Gay & Lesbian Social Services*, 30(4), 409–429. <https://doi.org/10.1080/10538720.2018.1509757>

■ Duggan, L. (2002). The new homonormativity: The sexual politics of neoliberalism. In R. Castronovo, & D. D. Nelson (Eds.), *Materializing Democracy: Toward a Revitalized Cultural Politics* (pp. 175–194). Duke University Press.

■ Dupre, A. M., & Goodgold, S. (2007). Development of physical therapy student cultural competency through international community service. *Journal of Cultural Diversity*, 14(3), 34–126.

■ Durso, L. E., & Gates, G. J. (2012). *Serving Our Youth: Findings from a National Survey of Services Providers Working with Lesbian, Gay, Bisexual and Transgender Youth Who Are Homeless or At Risk of Becoming Homeless*. UCLA: The Williams Institute. <https://escholarship.org/uc/item/80x75033>

■ Faix-Prukner, Cs., & Rózsa, K. (2015). *A leszbikus, meleg és biszexuális emberek tapasztalatai az egészségügyben Magyarországon*. Háttér Társaság

■ Fausto-Sterling, A. (2019). Gender/Sex, Sexual Orientation, and Identity Are in the Body: How Did They Get There? *The Journal of Sex Research*, 56(4–5), 529–555. <https://doi.org/10.1080/00224499.2019.1581883>

■ Feinstein, B. A., & Newcomb, M.E. (2016). The role of substance use motives in the associations between minority stressors and substance use problems among young men who have sex with men. *Psychology of Sexual Orientation and Gender Diversity*, 3(3), 357–366. <https://doi.org/10.1037/sgd0000185>

■ Fergusson, D., Hoorwood, J., & Beautrais, A. (1999). Is sexual orientation related to mental health problems and suicidality in young people? *Archives of General Psychiatry*, 56(10), 876–880. <https://doi.org/10.1001/archpsyc.56.10.876>

■ Filice, M. (2020). Two-Spirit. In *The Canadian Encyclopedia*. <https://www.thecanadianencyclopedia.ca/en/article/two-spirit>

■ Fish, J., & Bewley, S. (2010). Using human rights-based approaches to conceptualise lesbian and bisexual women’s health inequalities. *Health & Social Care in the Community*, 18(4), 355–62. <https://doi.org/10.1111/j.1365-2524.2009.00902.x>

■ Foronda, C., Baptiste, D. L., Reinholdt, M. M., & Ousman, K. (2016). Cultural Humility: A Concept Analysis. *Journal of Transcultural Nursing*, 27(3), 210–217. <https://doi.org/10.1177/1043659615592677>

■ Fric, K. (2019). How does being out at work relate to discrimination and unemployment of gays and lesbians? *Journal for Labour Market Research*, 53(14). <https://doi.org/10.1186/s12651-019-0264-1>

■ Frost, D. M., Lehavot, K., & Meyer, I. H. (2015). Minority stress and physical health among sexual minority individuals. *Journal of Behavioral Medicine*, 38(1), 1–8. <https://doi.org/10.1007/s10865-013-9523-8>

■ Ghabrial, M. A. (2017). “Trying to figure out where we belong”: Narratives of racialized sexual minorities on community, identity, discrimination, and health. *Sexuality Research & Social Policy: A Journal of the NSRC*, 14(1), 42–55. <https://doi.org/10.1007/s13178-016-0229-x>

■ Goldbach, J. T., Tanner-Smith, E. E., Bagwell, M., & Dunlap, S. (2014). Minority stress and substance use in sexual minority adolescents: a meta-analysis. *Prevention Science*, 15(3), 350–63. <https://doi.org/10.1007/s11121-013-0393-7>

■ Grant, J.M., Mottet, L.A., Tanis, J., Harrison, J., Herman, J.L., & Keisling, M. (2011). *Injustice at Every Turn: A Report of the National Transgender Discrimination Survey*. National Center for Transgender Equality and National Gay and Lesbian Task Force. https://www.transequality.org/sites/default/files/docs/resources/NTDS_Report.pdf

■ Grant, R., & Nash, M. (2020). Homonormativity or queer disidentification? Rural Australian bisexual women’s identity politics. *Sexualities*, 23(4), 592–608. <https://doi.org/10.1177/1363460719839921>

■ Hatzenbuehler, M. L. (2009). How does sexual minority stigma “get under the skin”? A psychological mediation framework. *Psychological Bulletin*, 135(5), 707–730. <https://doi.org/10.1037/a0016441>

■ Hatzenbuehler M. L., & Pachankis J. E. (2016). Stigma and Minority Stress as Social Determinants of Health Among Lesbian, Gay, Bisexual, and Transgender Youth: Research Evidence and Clinical Implications. *Pediatric Clinics of North America*, 63(6), 985–997. <https://doi.org/10.1016/j.pcl.2016.07.003>

■ Hegna, K., & Wichstrøm, L. (2007). Suicide attempts among Norwegian gay, lesbian and bisexual youths. *Acta Sociologica*, 50(1), 21–37.

■ Heinämaa, S. (2012). Gender, Sex and Embodiment. In D. Zahavi (Ed.) *Oxford Handbook of Contemporary Phenomenology*. Oxford University Press.

■ Herek, G. M., & Berrill, K. T. (1990). Anti-Gay Violence and Mental Health: Setting an Agenda for Research. *Journal of Interpersonal Violence*, 5(3), 414–423. <https://doi.org/10.1177/088626090005003013>

■ Herek, G. M. (2007). Confronting sexual stigma and prejudice: Theory and practice. *Journal of Social Issues*, 63(4), 905–925. <https://doi.org/10.1111/j.1540-4560.2007.00544.x>

■ Herman-Giddens, M. E., Steffes, J., Harris, D., Slora, E., Hussey, M., Dowshen, S. A., Wasserman, R., Serwint, J. R., Smitherman, L., & Reiter, E. O. (2012). Secondary sexual characteristics in boys: Data from the pediatric research in office settings network. *Pediatrics*, 130(5), 1058–1068. <https://doi.org/10.1542/peds.2011-3291>

■ Herrell, R., Goldberg, J., True, W., Ramakrishnan, V., Lyons, M., Elsen, S., & Ming, T. (1999). Sexual orientation and suicidality. *Archives of General Psychiatry*, 56, 867–875. <https://doi.org/10.1001/archpsyc.56.10.867>

■ Hidasi, B. (2014). *TransCare 2014 – Documentation of discrimination in the field of health of trans* people in Hungary*. Transvanilla Transgender Association.

■ Higgs P. (2018). The Shifting Boundaries of Medical Knowledge. In G. Scambler (Ed.) *Sociology as Applied to Health and Medicine* (7th ed., pp. 243–259). Palgrave Macmillan.

■ Huebner, D. M., Rebhook, G. M., & Kegeles, S. M. (2004). Experiences of harassment, discrimination, and physical violence among young gay and bisexual men. *American Journal of Public Health*, 94(7), 1200–1203. <https://doi.org/10.2105/ajph.94.7.1200>

■ ILGA Europe. (2015). *Glossary*. https://www.ilga-europe.org/sites/default/files/glossary_october_2015_edition.pdf

■ Indian Health Service (IHS). (2020). *Lesbian, Gay, Bisexual and Transgender Health - Two Spirit*. <https://www.ihs.gov/lgbt/health/twospirit>

■ Institute of Medicine (US). (2011). Chapter 2: Context for LGBT Health Status in the United States. In *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding* (pp. 25–88). The National Academies Press. <https://www.nap.edu/catalog/13128/the-health-of-lesbian-gay-bisexual-and-transgender-people-building>

■ Intersex Society of North America. (2008). *FAQ - Is a person who is intersex a hermaphrodite?* <https://isna.org/faq/hermaphrodite>

■ James, S.E., Herman, J.L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The Report of the 2015 U.S. Transgender Survey*. National Center for Transgender Equality. <https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf>

■ Jansen, J., & Wehrle, M. (2018). The Normal Body: Female Bodies in Changing Contexts of Normalization and Optimization. In C. Fischer C. L. Dolezal (Eds.) *New Feminist Perspectives on Embodiment* (pp. 37–55). Palgrave MacMillan.

■ Jurčić, M. (2020). *Working with Victims of Anti-LGBT Hate Crimes - A Practical Handbook*. <https://galop.org.uk/wp-content/uploads/2021/06/Working-with-Victims-of-Hate-Crimes.pdf>

- Kelleher, C. (2009). Minority stress and health: Implications for lesbian, gay, bisexual, transgender, and questioning (LGBTQ) young people. *Counselling Psychology Quarterly*, 22(4), 373–379. <https://doi.org/10.1080/09515070903334995>
- Kertzner R. M., Meyer I. H., Frost D. M., & Stirratt M. J. (2009). Social and psychological well-being in lesbians, gay men, and bisexuals: The effects of race, gender, age, and sexual identity. *American Journal of Orthopsychiatry*, 79(4), 500–510. <https://doi.org/10.1037/a0016848>
- Keuroghlian A. S., Ard K. L., & Makadon H. J. (2017). Advancing health equity for lesbian, gay, bisexual and transgender (LGBT) people through sexual health education and LGBT-affirming healthcare environments. *Sexual Health*, 14, 119–122. <https://doi.org/10.1071/SH16145>
- Lambda Legal. (2010). *When healthcare Isn't Caring: Lambda Legal's Survey of Discrimination against LGBT People and People with HIV*. Lambda Legal. <https://www.lambdalegal.org/publications/when-health-care-isnt-caring>
- Laurent, T., & Mihoubi, F. (2017). Sexual Orientation, Unemployment and Participation: Are Gays Less Employable than Straights? *Journal of Labor Research*, 38, 1–44. <https://doi.org/10.1007/s12122-016-9237-0>
- Lev, A. I. (2013). Gender Dysphoria: Two Steps Forward, One Step Back. *Clinical Social Work Journal*, 41(3), 288–296. <https://doi.org/10.1007/s10615-013-0447-0>
- Lhomond, B., Saurel-Cubizolles, M. J., Michaels, S., & CSF Group. (2014). A multidimensional measure of sexual orientation, use of psychoactive substances, and depression: results of a national survey on sexual behavior in France. *Archives of Sexual Behavior*, 43(3), 607–19. <https://doi.org/10.1007/s10508-013-0124-y>
- Liebert R. (2014) Pathologization. In T. Teo (Ed.) *Encyclopedia of Critical Psychology*. Springer.
- Link, B. G., & Phelan, J. C. (2001). Conceptualizing Stigma. *Annual Review of Sociology*, 27, 363–385. <https://doi.org/10.1146/annurev.soc.27.1.363>
- Livingston, N. A., Berke, D., Scholl, J., Ruben, M., & Shipherd, J. C. (2020). Addressing Diversity in PTSD Treatment: Clinical Considerations and Guidance for the Treatment of PTSD in LGBTQ Populations. *Current Treatment Options in Psychiatry*, 7, 53–69. <https://doi.org/10.1007/s40501-020-00204-0>
- Makadon, H. J., Mayer, K. H., Potter, J., & Goldhammer, H., (2015). *The Fenway guide to lesbian, gay, bisexual, and transgender health*. American College of Physicians.
- Mallory, C., & Sears, B. (2015). *Employment Discrimination Based on Sexual Orientation and Gender Identity in Montana*. <https://williamsinstitute.law.ucla.edu/wp-content/uploads/LGBT-Employment-Discrimination-MT-Mar-2015.pdf>
- Martin H. P. (1991). The coming-out process for homosexuals. *Hospital & community psychiatry*, 42(2), 158–62. <https://doi.org/10.1176/ps.42.2.158>
- Matevossian, S. N., Vvedensky, G. E., & Kulish S. B. (2008) Psychopathological qualification of non-acceptance of one's primary and secondary sex characteristics in gender identity disorder. *European Psychiatry*, 23(2), 387. <https://doi.org/10.1016/j.eurpsy.2008.01.1339>
- Mays V. M., Juster R. P., Williamson T. J., Seeman, T. E., & Cochran, S. D. (2018) Chronic Physiologic Effects of Stress Among Lesbian, Gay, and Bisexual Adults: Results From the National Health and Nutrition Examination Survey. *Psychosomatic Medicine*, 80(6), 551–563. <https://doi.org/10.1097/PSY.0000000000000600>
- McBee, C. (2013). Towards a more affirming perspective: Contemporary psychodynamic practice with trans* and gender non-conforming individuals. In *Advocates' Forum* (pp. 37–52). University of Chicago School of Social Service Administration.
- McConnell, E. A., Janulis, P., Phillips, G., 2nd, Truong, R., & Birkett, M. (2018). Multiple Minority Stress and LGBT Community Resilience among Sexual Minority Men. *Psychology of Sexual Orientation and Gender Diversity*, 5(1), 1–12. <https://doi.org/10.1037/sgd0000265>

- McDavitt, B., Iverson, E., Kubicek, K., Weiss, G., Wong, C. F., & Kipke, M. D. (2008). Strategies Used by Gay and Bisexual Young Men to Cope with Heterosexism. *Journal of gay & lesbian social services*, 20(4), 354–380. <https://doi.org/10.1080/10538720802310741>
- McKay, B. (2011). Lesbian, gay, bisexual, and transgender health issues, disparities, and information resources. *Medical Reference Services Quarterly*, 30(4), 393–401. <https://doi.org/10.1080/02763869.2011.608971>
- Meyer, I. H., & Frost, D. M. (2013). Minority stress and the health of sexual minorities. In C. J. Patterson, & A. R. D'Augelli (Eds.) *Handbook of psychology and sexual orientation* (pp. 252–266). Oxford University Press.
- Meyer I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Morris, J. F. (1997). Lesbian coming out as a multidimensional process. *Journal of Homosexuality*, 33(2), 1–22. https://doi.org/10.1300/J082v33n02_01
- Mustanski, B. S., Garofalo, R., & Emerson, E. M. (2010). Mental health disorders, psychological distress, and suicidality in a diverse sample of lesbian, gay, bisexual, and transgender youths. *American Journal of Public Health*, 100(12), 2426–2432. <https://doi.org/10.2105/AJPH.2009.178319>
- Myfanwy, M. (2018). The Doctor-Patient Relationship. In G. Scambler (Ed.) *Sociology as Applied to Health and Medicine* (7th ed., pp. 77–98). Palgrave Macmillan.
- Nadal, K. L., Whitman, C. N., Davis, L. S., Erazo, T., & Davidoff, K. C. (2016). Microaggressions Toward Lesbian, Gay, Bisexual, Transgender, Queer, and Genderqueer People: A Review of the Literature. *The Journal of Sex Research*, 53(4–5), 488–508. <https://doi.org/10.1080/00224499.2016.1142495>
- National LGBTI Health Alliance. (2013). *Cultural Competency Implementation Framework: Achieving Inclusive Practice with Lesbian, Gay, Bisexual, Trans and Intersex (LGBTI) Communities*. https://d3n8a8pro7vhmxc.cloudfront.net/lgbtihealth/pages/634/attachments/original/1585382575/Cultural_Competency_Implementation_Framework.pdf?1585382575
- National Women's Law Center (NWLCC). (2014). *Healthcare Refusals Harm Patients. The Threat to LGBT People and Individuals Living with HIV/AIDS*. https://nwlc.org/wp-content/uploads/2015/08/lgbt_refusals_factsheet_05-09-14.pdf
- Nayak, A., & Kehily M. J. (2006) Gender Undone: Subversion, Regulation and Embodiment in the Work of Judith Butler. *British Journal of Sociology of Education*, 27(4), 459–72. <https://doi.org/10.1080/01425690600803038>
- Ng, E. S., & Rumens, N. (2017). Diversity and inclusion for LGBT workers: Current issues and new horizons for research. *Canadian Journal of Administrative Sciences*, 34(2), 109–120. <https://doi.org/10.1002/cjas.1443>
- Ortega, R. M., & Coulborn, K. (2011). Training Child Welfare Workers from an Intersectional Cultural Humility Perspective: A Paradigm Shift. *Child Welfare*, 90(5), 27–49.
- Ozeren, E. (2014). Sexual Orientation Discrimination in the Workplace: A Systematic Review of Literature. *Procedia – Social and Behavioral Sciences*, 109, 1203–1215. <https://doi.org/10.1016/j.sbspro.2013.12.613>
- Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin*, 135(4), 531–554. <https://doi.org/10.1037/a0016059>
- Parent, M. C., Arriaga, A. S., Gobble, T., & Wille, L. (2018). Stress and substance use among sexual and gender minority individuals across the lifespan. *Neurobiology of Stress*, 10, 100–146. <https://doi.org/10.1016/j.ynstr.2018.100146>

- Patterson, J. G., & Jabson, J. M. (2018). Sexual orientation measurement and chronic disease disparities: National Health and Nutrition Examination Survey, 2009–2014. *Annals of Epidemiology*, 28(2), 72–85. <https://doi.org/10.1016/j.annepidem.2017.12.001>
- Puckett, J. A., Maroney, M. R., Wadsworth, L. P., Mustanski, B., & Newcomb, M. E. (2020). Coping with discrimination: The insidious effects of gender minority stigma on depression and anxiety in transgender individuals. *Journal of Clinical Psychology*, 76(1), 176–194. <https://doi.org/10.1002/jclp.22865>
- Puhl, R. M., & Heuer C.A. (2009). The stigma of obesity: a review and update. *Obesity Silver Spring*, 17(5), 941–964. <https://doi.org/10.1038/oby.2008.636>
- Reisner, S. L., Hughto, J. M., Dunham, E. E., Heflin, K. J., Begenyi, J. B., Coffey-Esquivel, J., & Cahill, S. (2015). Legal protections in public accommodations settings: A critical public health issue for transgender and gender nonconforming people. *Milbank Quarterly*, 93(3), 484–515. <https://doi.org/10.1111/1468-0009.12127>
- Richards, J. E., & Hawley, R. S. (2011). Chapter 8 - Sex Determination: How Genes Determine a Developmental Choice. In J. E. Richards, & R. S. Hawley *The Human Genom. A User's Guide* (pp. 273–298). Academic Press.
- Roberts, A. L., Austin, S. B., Corliss, H. L., Vandermorris, A., & Koenen, K. C. (2010). Pervasive trauma exposure among US sexual orientation minority adults and risk of posttraumatic stress disorder. *American Journal of Public Health*, 100(12), 2433–2441. <https://doi.org/10.2105/AJPH.2009.168971>
- Rosario, M., Schrimshaw, E. W., & Hunter, J. (2012). Risk Factors for Homelessness Among Lesbian, Gay, and Bisexual Youths: A Developmental Milestone Approach. *Children and Youth Services Review*, 34(1), 186–193. <https://doi.org/10.1016/j.childyouth.2011.09.016>
- Rudin, J., Billing T., Farro, A., & Yang Y. (2020). Bigenderism at work? Organizational responses to trans men and trans women employees. *Organization Management Journal*, 17(2), 63–81. <https://doi.org/10.1108/OMJ-02-2018-0507>
- Safren, S. A., & Heimberg, R. G. (1999). Depression, hopelessness, suicidality and related factors in sexual minority and heterosexual adolescents. *Journal of Consulting and Clinical Psychology*, 67(6), 859–866. <https://doi.org/10.1037//0022-006x.67.6.859>
- Sánchez, J. P., Hailpern, S., Lowe, C., & Calderon, Y. (2007). Factors associated with emergency department utilization by urban lesbian, gay, and bisexual individuals. *Journal of Community Health*, 32(2), 149–156. <https://doi.org/10.1007/s10900-006-9037-1>
- Schneebaum, A., & Badgett, M. V. L. (2019). Poverty in US Lesbian and Gay Couple Households. *Feminist Economics*, 25(1), 1–30. <https://doi.org/10.1080/13545701.2018.1441533>
- Schonfeld W. A. (1943). Primary and secondary sexual characteristics. Study of their development in males from birth through maturity, with biometric study of penis and testes. *The American Journal of Diseases of Children*, 65(4), 535–549. <https://doi.org/10.1001/archpedi.1943.02010160019003>
- Sears, B., & Mallory, C. (2011). *Documented evidence of employment discrimination and its effects on LGBT people*. UCLA: The Williams Institute. <https://williamsinstitute.law.ucla.edu/wp-content/uploads/Sears-MalloryDiscrimination-July-2011.pdf>
- Seelman, K. L., Lewinson, T., Engleman, L., Maley, O. R., & Allen, A. (2017). Coping strategies used by LGB older adults in facing and anticipating health challenges: A narrative analysis. *Journal of Gay & Lesbian Social Services*, 29(3), 300–318. <https://doi.org/10.1080/10538720.2017.1310644>
- Sharek, D., McCann, E., Sheerin, F., Glacken, M., & Higgins, A. (2015). Older LGBT people's experiences and concerns with healthcare professionals and services in Ireland. *International Journal of Older People Nursing*, 10(3), 230–40. <https://doi.org/10.1111/opn.12078>

- Sills, K. (2017). Constructing the 'Addict': A Discourse Analysis of National Newspapers Concerning North America's First Supervised Injection Site. [MA Thesis, Wilfrid Laurier University]. https://scholars.wlu.ca/brantford_sjce/26/
- Sue, D. W. (2001). Multidimensional facets of cultural competence. *The Counseling Psychologist*, 29(6), 790–821. <https://doi.org/10.1177/0011000001296002>
- Tascón, S. M., & Gatwiri, K. (2020). Towards Cultural Humility: Theorising Cultural Competence as Institutionalised Whiteness. *Social Work & Policy Studies: Social Justice, Practice and Theory*, 3(1).
- Tervalon, M., & Murray-Garcia, J. (1998). Cultural humility versus cultural competence: A critical distinction in defining physician training outcomes in multicultural education. *Journal of Healthcare for the Poor and Underserved*, 9(2), 117–125. <https://doi.org/10.1353/hpu.2010.0233>
- The Fenway Institute - The National LGBT Health Education Center. (2010). *Glossary of LGBT Terms for Healthcare Teams*. https://fenwayhealth.org/documents/the-fenway-institute/handouts/Hand-out_7-C_Glossary_of_Gender_and_Transgender_Terms__fi.pdf
- The Fenway Institute - The National LGBT Health Education Center. (2016). *Glossary of LGBT Terms for Healthcare Teams*. https://www.lgbtqiahealtheeducation.org/wp-content/uploads/LGBT-Glossary_March2016.pdf
- The Fenway Institute - The National LGBT Health Education Center. (2020). *LGBTQIA+ Glossary of Terms for Healthcare Teams*. <https://www.lgbtqiahealtheeducation.org/publication/lgbtqia-glossary-of-terms-for-health-care-teams>
- The Regents of the University of California, Davis Campus. (2020). *LGBTQIA Resource Center Glossary*. <https://lgbtqia.ucdavis.edu/educated/glossary>
- Toomey, R. B., Ryan, C., Diaz, R.M., & Russell, S. T. 2018. Coping With Sexual Orientation-Related Minority Stress. *Journal of homosexuality*, 65(4), 484–500. <https://doi.org/10.1080/00918369.2017.1321888>
- Tyl, R. W. (2014). Toxicity Testing, Reproductive. In P. Wexler (Ed.) *Encyclopedia of Toxicology* (3rd ed., pp. 682–692). Academic Press.
- UNC - Chapel Hill Safe Zone. (2017). *Asexuality, Attraction, and Romantic Orientation*. <https://lgbtq.unc.edu/sites/lgbtq.unc.edu/files/documents/Asexuality%20and%20Romantic%20Orientation.pdf>
- Weininger, O. (2005). *Sex and character: An investigation of fundamental principles*. Indiana University Press.
- Whitehead, J., Shaver, J., & Stephenson, R. (2016). Outness, Stigma, and Primary healthcare Utilization among Rural LGBT Populations. *PLOS ONE*, 11(1), 146–139. <https://doi.org/10.1371/journal.pone.0146139>
- Williams, D. R., Lawrence, J. A., Davis, B. A., & Vu, C. (2019). Understanding how discrimination can affect health. *Health Services Research*, 54, 1374–1388. <https://doi.org/10.1111/1475-6773.13222>
- Woodward, K. (2020). Gendered Bodies: Sexed Lives. In D. Richardson, & V. Robinson (Eds.) *Introducing Gender and Women's Studies* (5th ed., pp. 128–143). Red Globe Press.

Chapter 2. — Health status

2.1) Mental health

2.1.1) Introduction

When addressing the mental health challenges of the LGBTI population, it is important to state that being a member of a sexual minority group in itself does not lead to increased vulnerability to mental disorders. The majority of LGBTI people are well adjusted and mentally healthy. Being a minority, however, still means facing more violence, and so a greater risk of mental health problems than for majority people.

This increased risk emerges from the negative impacts that affects many LGBTI persons to this day. The minority stress theory suggests that because of stigmatisation, prejudice, and discrimination, LGBTI people experience more stress than hetero-cis-normative people, and that this disproportionate strain leads to an increased risk of health problems.

Stigma and discrimination, as well as the negative life experiences such as rejection by family and friends and homo/bi/trans/interphobic violence, have a substantial negative effect on mental health and for those who are less resilient can result in serious suffering. Being bullied and

discriminated against can lead to depression in some LGBTI persons and can even lead to suicide for the most vulnerable among them. Those who have suffered physical, sexual, or mental trauma have a higher risk of developing posttraumatic stress disorder (PTSD) (Roberts et al. 2012). Chronic stress experienced by internalising stigma not only leads to poorer mental health but can also induce unhealthy behaviours (like addiction or risk behaviour) which in turn lead to worse physical and mental health outcomes (Meyer 2003).

Data show that LGBTI people are at greater risk of depression, anxiety, and suicidal behaviour. They have significantly elevated rates of smoking, alcohol and substance abuse compared to heterosexual people (Institute of Medicine (U.S.) 2011).

Contributing to worse mental health outcomes, LGBTI people face barriers when accessing mental healthcare. Some of them choose not to seek medical care at all or avoid disclosing their identity because of experienced or perceived discrimination. Others cannot find culturally competent care because of a limited availability

or lack of trained providers. The pathologisation of the LGBTI population by the psychiatric community has a long historic background and sadly contributes to mistrust in the profession and its practitioners to this day.

Homosexuality has been removed from the diagnostic classification systems only relatively recently. The 10th revision of the ICD (International Classification of Diseases) in 1990 by the World Health Assembly finally discarded homosexuality as a code but introduced a new category “Disorders associated with sexual development and orientation” with a definitive statement that sexual orientation by itself is not regarded as a disorder (van Drimmelen-Krabbe 1994). This category is going to be deleted entirely from the newest revision of the ICD (ICD-11), on the recommendation of the WHO Working Group on the Classification of Sexual Disorders and Sexual Health. Therefore the ICD 11., officially coming into effect on 1 January 2022, will not contain any category for diagnoses based primarily on sexual orientation (Cochran et al. 2020). From the Diagnostic and Statistical Manual (DSM), the American Psychiatric Association (APA) removed the diagnosis of homosexuality in 1973, replacing it first with the “Sexual Orientation Disturbance” (SOD) and later with the “Ego Dystonic Homosexuality” (EDH) diagnosis. Only in 1987, after decades of long debates, was the ‘normal variation theory’ adopted, which states that homo- and bisexuality as a phenomenon occurs naturally and is a normal variation of human sexuality just as heterosexuality (Drescher 2015).

There is also an ongoing professional debate around the de-medicalisation of trans identity. The arguments in favour of keeping the trans-related diagnoses in classification systems include that this allows trans people access to gender affirming therapies, while those campaigning for removing these from the DSM and the ICD altogether claim that trans people should have access to this type of interventions without a medical diagnosis.

Healthcare providers should be aware of the difficulties faced by sexual minorities in order of being able to provide effective treatment for their LGBTI patients. Their affirming and supportive attitude is crucial in establishing a trustful client-provider relationship, enables honest and open communication and ultimately leads to better mental health outcomes.

2.1.2) General problems affecting the whole spectrum

2.1.2.a) Mental health problems: Major depression, bipolar disorder, and generalised anxiety disorder

There are significant disparities in mental health experienced by LGBTI people. Studies since the 1990s evidenced a higher prevalence of common mental disorders when compared to heterosexuals. LGB persons were more likely to be diagnosed with major depressive disorder and generalised anxiety disorders in a representative sample of U.S. adults (Wu et al. 2018). Data from the US Behavioral Risk Factor Surveillance System (BRFSS) surveys also show a constant disparity in the mental health risk of the LGBT respondents. LGBT people reported higher odds of anxiety, depression and mental distress compared with heterosexual people in successive BRFSS surveys (Gonzales and Henning-Smith 2017; Landers, Mimiaga, and Conron 2011; Matthews and Lee 2014)

The disparity does not seem better on the other side of the Atlantic. A study examining English and Welsh population found that gay and lesbian respondents had a higher prevalence of common mental disorders and had higher levels of psychological distress than their heterosexual counterparts (King et al. 2003). A UK meta-analysis pooling data from 12 population surveys conducted between 2008 and 2013 found that LGB

people have a higher prevalence of poor mental health and wellbeing than heterosexuals. Lesbian, gay, bisexual and ‘other’ non-heterosexual adults were twice as likely to report symptoms of poor mental health (i.e., anxiety, depression) than heterosexual adults (Semlyen et al. 2016).

In a population-based Dutch survey, gay and other same-sex attracted people reported a higher prevalence of mental health disorders than heterosexual persons (Sandfort et al. 2014). Gay and other same-sex attracted men were also more likely to have major depression, social phobia, and general anxiety disorder, panic and drug abuse disorders, while women were more likely to have had bipolar disorder, alcohol addiction and drug addiction, mood and anxiety disorder and social phobia disorders (Sandfort et al. 2014).

While the above studies were performed taking different approaches, using various measures, and examining different mental health outcomes, the results point in the same direction. The conclusion may be drawn that LGBTI people experience greater distress, therefore might have poorer mental health than the general population.

Studies examining the risks of gay, lesbian, bisexual, trans and intersex people separately discovered significant differences between subgroups, indicating that each sexual and gender minority subgroup has its specific risk-factors and different vulnerability to mental health problems. Bisexual men may be especially at risk of poor mental health, such as stress and depression, reporting significantly more frequent mental distress compared even to gay men (Caceres et al. 2018).

Studies focusing on trans individuals are limited, although data shows that depression, suicidality and self-harm are significant among trans individuals too, especially among trans youth (Grossman and D’Augelli 2007). Trans patients have been diagnosed with depression, schizo-

phrenia, and substance use disorders more often than cisgender patients. Trans patients also have higher rates of potentially disabling mental health and neurological and chronic pain conditions (Dragon et al. 2017).

Mental health disorders, like depression and anxiety disorder, originate from a combination of genetic, environmental, and psychological factors. Besides the intrinsic – endocrinological and biological – causes, external factors, such as environmental stressors act as triggers or exacerbating agents. These can be occasional, like experiencing verbal or physical abuse from homophobic or transphobic members of society, or constant, like the person’s religious upbringing (the feeling of committing a sin or being condemned to hell) or rejection from family and friends. Internalised homophobia further aggravates the mental burden.

Exposure to victimisation – such as physical and sexual abuse, homelessness, and intimate partner violence – is also linked to suicidality and depressive symptoms (McLaughlin et al. 2012). Similarly, parental rejection is associated with poorer mental health outcomes: higher levels of depression and more suicide attempts (Ryan et al. 2009).

2.1.2.b) Suicide and self-harm

As sexual orientation is not recorded in death certificates, there is no data on the actual number of suicides among LGBTI people. Epidemiological studies, however, continuously describe elevated rates of suicidal ideation and behaviours in sexual and gender minorities (King et al. 2008a). In a sample of LGB individuals, 91% reported ever having suicidal thoughts; of these, 41% had seriously considered suicide and 36% had attempted suicide (McBee-Strayer and Rogers 2002). Therefore, it is safe to state that sexual minorities are at a higher risk of suicide than the general population.

Non-suicidal self-injury rates show a similar pattern: the prevalence of self-injury is higher among sexual minority individuals compared to the heterosexual and/or cisgender population, with trans and bisexual individuals being at the greatest risk (Liu et al. 2019).

These findings indicate the importance of screening for suicidal thoughts and behaviours in this population and developing or employing preventive programs adjusted to the specific needs and circumstances of LGBTI individuals.

2.1.3.) Problems affecting specific groups

2.1.3.a) Gay and bisexual men

Gay and bisexual men’s health problems are similar to those of all men; however, they may also experience certain risk factors that can impact their health in specific ways. Besides the above-discussed topics about the general concerns affecting the mental health of LGBTI minorities, there are specific problems affecting expressly gay and bisexual men.

Body image concerns and eating disorders

Gay and bisexual men tend to be more dissatisfied with their bodies and are at a greater risk for eating disorders compared to heterosexual men. While few of them reach full anorexia or bulimia, symptoms like dieting, binge eating, purging and using diet pills are quite common, as well as body image concerns (concern with weight and shape; desire for muscularity), and the use of anabolic steroids for muscle building (Calzo et al. 2017; Parker and Harriger 2020).

One possible explanation is that gay and bisexual men may be more influenced by socially constructed notions of physical attractiveness

and feel more desire to conform to these beauty perceptions. Theories suggest that there is an increased attention in gay male communities on physical appearance and this may lead to increased pressure on members for conforming to the accepted beauty standards, or that gay and bisexual men suffer from similar pressures and demands as heterosexual women (as both aim to attract men), and this leads to a greater risk of body dissatisfaction within the population (Beren et al. 1996; Siever 1994).

Disordered eating behaviours among sexual minorities are also connected to stress-induced responses to victimisation, discrimination and homophobia. Internalised stigma can lead to self-hatred and self-punishing in forms of weight control or restrictive eating practises (Calzo et al. 2017; Reilly 2006). The physical health consequences of starving, purging and using of diet pills include dehydration, malnutrition, and illnesses of the digestive tract, while anabolic steroids use can lead to changes in the hormonal system, psychiatric symptoms, kidney, liver, musculoskeletal and cardiovascular problems. They can also contribute to other mental health problems, like mood disorders, anxiety or substance abuse.

Chemsex

Alcohol and substance abuse when engaging in sex has always been present among gay and bisexual men. The use of stimulants and psychoactive drugs (like mephedrone, crystal methamphetamine, GHB/GBL, cocaine and ketamine) to enable, enhance, intensify and prolong the sexual experience – lately dubbed as chemsex – has become more prevalent in the last decades (Tomkins, George, and Kliner 2019). There is a subgroup of MSM who engage in chemsex behaviours and are at increased risk of this negatively impacting their health and well-being. The concern connected with chemsex practices is their association with high-risk sexual behaviour (multiple sexual partners, condomless

intercourses) leading to increased transmission risk of blood-borne viruses and other sexually transmitted infections. There are findings that suggest there are also psycho-social consequences of high risk chemsex behaviours, as it has a negative impact on some participants’ social functioning and mental well-being (Maxwell, Shahmanesh, and Gafos 2019).

2.1.3.b) Lesbian and bisexual women

While sexual minority women have many of the same health concerns as heterosexual women, substantial sexual-orientation-related health disparities have been reported among them (Baptiste-Roberts et al. 2017).

Sexual minority women have higher rates of heavy drinking, alcohol-related problems and alcohol-abuse disorders than heterosexual women. Further, bisexual women show the highest risk of all sexual orientation subgroups. In studies that included both sexual minority men and women, alcohol outcomes were more prominent among sexual minority women (Hughes et al. 2020).

Bisexual women are at particularly high risk of alcohol and substance abuse. In a recent comprehensive study, bisexual women were at significantly greater risk for multiple substance abuse behaviours (binge drinking, marijuana, opioid-, illicit drug use and alcohol abuse disorder) compared to lesbian women (Schuler and Collins 2020). This may be attributable to bisexual-specific risk factors – unique social stressors for bisexual people – like the cultural invisibility of bisexuality and the anti-bisexual stigma.

2.1.3.c) Trans people

As a result of widespread prejudice and stigma, trans people often experience discrimination. The experienced minority stress results in

higher rates of smoking, drug and alcohol use (Hughto et al. 2021). Suicide attempts are more frequent and research also shows that depression, suicidality and self-harm are significant among trans individuals, especially trans youth (Grossman and D’Augelli 2007). In a national US study, 41% of respondents reported attempting suicide (Grant et al. 2011), while in multicentric European survey 24.5% of respondents have attempted suicide at least once in their life (Smiley et al. 2017).

Trans people have also been found to have elevated risk of engaging in disordered eating and weight and shape control behaviours, especially purging and diet pill use (Diemer et al. 2015). Other studies found trans men to be at particular risk for eating disorders and other body image-related behaviours (Witcomb et al. 2015). It is hypothesised that trans individuals – in addition to the minority stress-response – may adopt disordered eating behaviours to attain more masculine or feminine figures (Watson, Veale, and Saewyc 2017).

There is an ongoing debate about classifying the distress resulting from the incongruence between gender identity and the sex assigned at birth as a separate diagnostic entity. The DSM-5 introduced a new diagnostic term, ‘Gender dysphoria’, that refers to the psychological distress experienced by individuals when their gender identity does not match their physical anatomy. It was introduced instead of the earlier ‘gender identity disorder’ diagnosis in the previous versions of DSM, which pathologised gender diversity itself. The new diagnosis is supposed to aim specifically at the distress that some – but not all – trans people experience. Trans activists oppose using this diagnostic term as they aspire to remove trans-related diagnoses from the classification systems, and because it individualises the distress, instead of focusing on social expectations and violence. Some researchers also criticise the usage of ‘Gender dysphoria’ as it fails the intention of decreasing pathologisation and

adds to confusion around the terminology used in the academic literature (Davy and Toze 2018).

2.1.3.d) Intersex people

Although the majority of intersex people have been followed by the healthcare system since birth – although usually within the surgical specialties – there have only been limited studies regarding the mental health and wellbeing of the intersex population so far. A European study found higher prevalence of mental disorders and suicide attempts among intersex people (Falhammar et al. 2018), while in a recent US survey more than half of the intersex respondents suffered fair or poor mental health, especially in the younger age group. The most often reported diagnoses were depression, anxiety and PTSD (Rosenwohl-Mack et al. 2020). Living with “differences in sex development” could mean tremendous stress and other difficulties. Intersex people suffer from the effect of medicalisation and pathologisation, the sways caused in their identity and the lack of models (and often the lack of information too) (GrApSIA and Audi 2014). Support groups are essential in order to advocate for and empower intersex people (GrApSIA and Audi 2014).

2.1.4.) Conversion therapy

Sadly, sometimes there is still need for clarification regarding ‘conversion therapy’, also known as ‘reparative’ or ‘gay-cure’ therapy. The concept of these therapies is based on an erroneous as-

sumption that being lesbian, gay or bisexual is an illness and therefore should be cured. There is no scientific evidence that sexual orientation can be changed and trying to do so is not only futile but can cause significant harm to the subject (Haldeman 2002). Statements by the European Association for Psychotherapy², the American Psychiatric Association³, the Royal College of Psychiatrists⁴, the American Medical Association⁵ and many other scientific bodies concurrently declare that the validity, efficacy, and ethics of clinical attempts to change an individual's sexual orientation are questionable and in unison condemn such practices.

Furthermore, the European Parliament resolution of 11 March 2021 on the declaration of the EU as an LGBTIQ Freedom Zone encouraged the Member States to criminalise conversion therapy practices (EP Resolution 2021/2557).

Healthcare providers have the responsibility of protecting and promoting the health and well-being of their patients and do so according to the scientifically validated, evidence-based recommendations. Research on conversion or reparative therapies has disproven their efficacy, and has also indicated that they may be harmful to patients. Attempts to change sexual orientation may cause or exacerbate distress and poor mental health in some individuals, including depression and suicidal thoughts. Minors are especially vulnerable, and interventions teaching or reinforcing stereotyped gender-normative behaviour may increase self-stigma and minority stress and ultimately increase the distress of children and adolescents (APA 2009).

2.2) Physical health

2.2.1) Introduction

The prevalence of certain diseases among sexual minorities was examined in many studies with results varying on the used sample. They examined the association of arthritis (Fredriksen-Goldsen et al. 2013; Patterson and Jabson 2018), asthma (Dilley et al. 2010; Heck and Jacobson 2006; Landers, Mimiaga, and Conron 2011), cardiovascular diseases and hypertension (Caceres et al. 2018; Everett and Mollborn 2013; Farmer et al. 2013), cancers (Boehmer et al. 2014; Zaritsky and Dibble 2010), and metabolic disorders like diabetes and high cholesterol levels (Beach, Elasy, and Gonzales 2018; Mays et al. 2018) with sexual minority status. While some studies found a positive association, there was no exclusive evidence of any physical disease being more prevalent in the overall LGBTI community. The most likely explanation is that sexual minorities consist of many different subgroups and populations, each with its special challenges, risks and protective factors, translating to specific health outcomes.

Furthermore, even within a smaller subgroup, there are many social, environmental, and habitual differences between the different members. Two lesbian women, while having the same elevated risk of being smokers, will have different risks of developing chronic obstructive pulmonary disease (COPD) according to their difference in age, socio-economic status, education level, place of living, health insurance status and many other factors. While in the following chapter we indicate certain physical illnesses that might be associated with different LGBTI subgroups, there is important to state that they are not linked with being a sexual minority person in itself, and different individuals are at very different levels of risk associated with the same disease even if they belong to the same sexual minority subgroup.

Thus, a clinician should be aware of higher risks of certain diseases in the LGBTI populations and offer or arrange the appropriate screenings but refrain from making assumptions that they suffer from certain conditions because they belong to a sexual minority group.

2.2.2) Physical health problems affecting the whole spectrum

Epidemiological studies have been conducted to ascertain whether the higher percentage of certain health-risk behaviours (like smoking or heavy drinking) and greater exposure to stress in the LGBTI population translate to a higher prevalence of certain risk- and stress-associated diseases (such as COPD, cardiovascular and liver diseases, cancer, etc). among sexual and gender minority people.

Since the 2000s, national research centres have started to include questions regarding sexual and gender identities in health censuses, thus providing statistically representative results in LGBTI health research. The studies observed considerable variability by sexual orientation and gender identity when examining the prevalence of chronic conditions like cancer, hypertension, coronary heart disease, stroke, COPD, asthma, diabetes, arthritis, hepatitis and kidney disease.

There were findings confirming a higher prevalence of multiple chronic conditions between lesbian and bisexual than heterosexual women but not in the case of gay and bisexual men (Gonzales, Przedworski, and Henning-Smith 2016).

2 <https://www.europsyche.org/quality-standards/eap-guidelines/eap-statement-on-conversion-therapy/>
3 <https://www.psychiatry.org/File%20Library/About-APA/Organization-Documents-Policies/Policies/Position-Conversion-Therapy.pdf>
4 https://www.rcpsych.ac.uk/pdf/PS02_2014.pdf
5 <https://www.ama-assn.org/system/files/2019-12/conversion-therapy-issue-brief.pdf>

Elevated odds of smoking translate into disparities in tobacco-related illnesses experienced by sexual minority individuals. **Pulmonary conditions** were found to be more prevalent in sexual minority groups: when analysing the data from the 2014–2015 Behavioral Risk Factor Surveillance System (BRFSS) they found that gay men were significantly more likely have chronic obstructive pulmonary disease compared to heterosexual men. Bisexual men were more likely to have asthma while lesbian women were more likely to have asthma and chronic obstructive pulmonary disease compared to heterosexual women (Gonzales and Henning-Smith 2017).

Chronic obstructive pulmonary disease was higher among bisexual adults than among straight adults (Ward et al. 2015) and sexual minorities were more likely to have asthma (Conron, Mimiaga, and Landers 2010; Landers et al. 2011). Compared with heterosexual smokers, gay and lesbian smokers were more likely to have had strep throat, and bisexual smokers were more likely to have had sinus infection, asthma, and bronchitis and had higher odds of acute respiratory infection even after adjusting for smoking (Blosnich, Jarrett, and Horn 2010).

Cardiovascular diseases (CVD) – as a leading cause of death in Europe – and their risk factors are another broadly studied subject when examining LGBTI health disparities. The increased presence of risk factors (smoking, alcohol consumption, mental distress, combined in some subgroups with obesity) suggests greater CVD risk in sexual minority populations. Some studies also describe the role of the minority stress as a mediating factor, by stress-hormone and proinflammatory cytokines related to immune, metabolic and cardiovascular responses (Juster et al. 2015; Mays et al. 2018).

While some studies have found an increased prevalence of certain diseases, there is no conclusive evidence that CVD affects sexual minorities, in general, more than the heterosex-

ual population. In Wu’s study, LGB persons had significantly higher CVD prevalence than heterosexuals: they showed higher odds of angina, myocardial infarction, stroke, and other heart diseases. For CVD risk factors, arteriosclerosis, hypertension, high cholesterol, and diabetes were elevated among LGB persons. Wu, however, examined the LGB population as a whole and did not compare the sexual minority subgroups (Wu et al. 2018).

In the studies where researchers compared the subgroups, they found that gay men had similar CVD risk to exclusively heterosexual men, whereas bisexual men had a higher risk of CVD (Caceres et al. 2018). When examining the presence of risk factors lesbian women and bisexual people reported higher cardiovascular disease risk than heterosexual women (Conron et al. 2010).

Gay men had a higher prevalence of hypertension than heterosexual men, even though they were more likely to have BMIs in the healthy range. Controlling for BMI and physical activity further increased the disparity between gay and heterosexual men as gay men were nearly twice as likely to be hypertensive compared to heterosexual respondents. (Everett 2013)

Endocrine diseases also came under scrutiny. **Diabetes** was found to be more prevalent among sexual minorities in several studies, but its prevalence tends to differ between sexual minority subgroups. Gay and bisexual men were more likely to report a lifetime diabetes diagnosis than heterosexual men, even though they tended to be younger and had lower BMI levels – meaning lower risk profiles for diabetes – compared with heterosexual men in the sample from the 2014 Behavioral Risk Factor Surveillance System (BRFSS) study. Similar differences were not found for lesbian or bisexual women. They reported higher BMIs than heterosexual women but the prevalence of diabetes among lesbian and bisexual women did not differ from that

among heterosexual women (Beach, Elasy, and Gonzales 2018).

Cancer incidence is not recorded by sexual orientation, gender identity/expression or sex characteristics so in the absence of data, it is difficult to ascertain whether LGBTI people are at a higher risk of cancer in general. Studies showing more risk factors in LGBTI populations (eg. smoking, alcohol consumption, obesity, or risk of HPV infection) indicate that certain types of cancers may be more prevalent among sexual minorities. There are also some results from epidemiological studies indicating that breast, ovarian, endometrial, and cervical cancers might be more common among lesbian and bisexual women. Gay and bisexual men seem to have higher risks of colorectal, but lower risk of prostate cancers (Boehmer, Miao, and Ozonoff 2011).

An ecological study – using county-level sexual orientation data – found a significant positive association between greater population density of sexual minority men and women and colorectal cancer incidence. With respect to colorectal cancer mortality, they identified a positive association with a density of sexual minority men, but not women (Boehmer, Ozonoff, and Miao 2011). Boehmer also found a significant difference in the prevalence of cancer, but only among men. Gay men had twice the odds of a cancer diagnosis compared with heterosexual men (Boehmer, Miao, Linkletter, et al. 2014).

HIV associated cancer types are more common in HIV-positive sexual minorities. Incidence of anal cancer among HIV-positive MSM was 9-fold higher than among HIV-negative MSM with the latter still higher than that observed in the general population (Machalek et al. 2012).

A systematic analysis examining cancer occurrence in sexual minorities reviewed the literature regarding the seven cancer sites that may disproportionately affect LGBTI populations. Quinn and colleagues examined the studies on

anal, breast, cervical, colorectal, endometrial, lung and prostate cancers, and while some suggested greater occurrence of these cancers in the LGBTI population, they found that – except anal cancer in MSM – there is not enough data to establish whether the LGBTI population or its subgroups are at greater risk for these types of cancer (Quinn et al. 2015). A later performed systematic review, however, found a higher rate of cervical cancer in bisexual and a lower rate of uterine cancer in lesbian than heterosexual women (Robinson et al. 2017).

2.2.3) Physical health problems affecting specific groups

2.2.3.a) Lesbian and bisexual women

While examining the subgroups separately, studies reveal significant differences in health outcomes between the sexual minority subpopulations. Lesbian and bisexual women are more likely to be overweight than heterosexual women. They tend to have a greater body mass index (BMI) or a higher percentage of them have a BMI over 30 and this difference, beginning in adolescence, is consistent across the lifespan (Eliason et al. 2015).

Lesbian and bisexual women also are more likely to have arthritis, asthma and chronic obstructive pulmonary disease compared to heterosexual women (Gonzales and Henning-Smith 2017; Patterson and Jabson 2018). The prevalence of chronic obstructive pulmonary disease is specifically high in bisexual population and bisexual women (and men) evidenced disparities for asthma despite controlling for smoking and obesity, which was significantly higher compared not only to heterosexual, but also to lesbian women (Gonzales and Henning-Smith 2017).

Lesbian women have more risk factors for breast and reproductive (ovarian, endometrial, and cervical) cancers. The number of pregnancies and the cumulative time spent breastfeeding is a known protective factor against breast, ovarian and endometrial carcinoma (Babic et al., 2020; Chowdhury et al., 2015; Setiawan et al., 2013; Sung et al., 2016). Lesbian women – who, on average, have fewer pregnancies and breastfeed for a shorter time during their lifetime – may be at a greater risk for these cancer types than the general female population. Another risk factor is the lesbophobia and biphobia they face at the healthcare services, which reduces their disposition to attend these services, reducing the effectiveness of prevention programs for them.

Furthermore, lesbians tend to have higher body mass indices (BMI) which is an additional risk factor. These, combined with lower tendency of attending screening programs puts them at increased risk of cancer (Brandenburg et al. 2007; Zaritsky and Dibble 2010). A systematic review found that compared to their heterosexual counterparts, bisexual women have higher rates of cervical cancer; lesbian women, however, have lower rates of endometrial cancer (Robinson et al. 2017).

2.2.3.b) Gay and bisexual men

While gay men’s body weight tends to be in the normal range more often than of their heterosexual counterparts (Mays et al. 2018), bisexual men seem to have a greater risk of being overweight and obesity, and, assumedly in connection with that, a higher risk of cardiovascular disease than gay and heterosexual men (Dyar et al. 2019). The prevalence of pulmonary conditions (asthma and chronic obstructive pulmonary disease) is also higher among bisexual men (Gonzales and Henning-Smith 2017; Ward et al. 2015). In some studies, this increased risk is explained by the higher rates of tobacco use, though there are studies where the differences remain despite

controlling for smoking (Patterson and Jabson 2018).

Bisexual men also have higher CVD risk factors – higher rates of mental distress, obesity, elevated blood pressure and glycosylated hemoglobin, heavy drinking and smoking – than heterosexual or gay men according to comprehensive US studies (Caceres et al. 2018; Gonzales et al. 2016) and as such, are in need of special attention from healthcare professionals.

2.2.3.c) Trans people

Trans people after gonadectomy or undergoing hormone replacement therapy may be at higher risk of osteopenia or osteoporosis. Blood clotting – a rare, but severe side effect – may also occur (especially among trans people who also smoke). Problems with sexual desire also occur both as side effects of hormone therapy and as a result of genital surgeries. The latter can also lead to pain, scarring and loss of sensation. (Chew et al. 2018; Zeeman and Aranda 2020). There is also the possibility that trans people are at greater risk of certain cancer types (for more detail see Chapter 3.3.2.d).

2.2.3.d) Intersex people

Intersex individuals also have some specific health concerns and health needs. In terms of general health and comorbidities, Falhammar and colleagues analysed the health status of intersex people on a large sample and found that though 91.4 percent have good self-reported health, dyslipidemia, CVDs, BMI deviations (both lower and higher than average), malignancy, osteoporosis, fractures and suicide attempts are more common among them (Falhammar, Claahsen-van der Grinten, Reisch, Slowikowska-Hilczer, Nordenström, Roehle, Bouvattier, Kreukels, Köhler and dsd-LIFE group, 2018). The risk for these conditions varies with age

and lifestyle, and also within the investigated subgroups (Falhammar, Claahsen-van der Grinten, Reisch, Slowikowska-Hilczer, Nordenström, Roehle, Bouvattier, Kreukels, Köhler and dsd-LIFE group, 2018).

We must also highlight the effects of early gonadectomy and the following hormonal therapies (Tyutyusheva, Mancini, Baroncelli, D’Elios, Peroni, D., Meriggiola and Bertelloni, 2021). Some studies argue that intersex people have a higher risk for gonadal pre-neoplasias and neoplasias or germ cell tumors, therefore in many cases, gonadectomy is performed on intersex children in order to prevent later neoplasias (which is considered as mutilation among intersex people and many of the health professionals) (Tyutyusheva, Mancini, Baroncelli, D’Elios, Peroni, D., Meriggiola and Bertelloni, 2021; Dicken, Billmire, Krailo, Xia, Shaikh, Cullen, Olson, Pashankar, Malogolowkin, Amatruda, Rescorla, Egler, Ross, Rodriguez-Galindo and Frazier, 2018; AI; Looijenga, Hersmus, Oosterhuis, Cools, Drop and Wolffenbuttel, 2007). On the other hand, other studies draw attention to the diverse categorisation of intersex variations, the prolonged expression of fetal germ cell markers (the probable overlapping of delayed maturation and early neoplastic lesions), and the possible sampling bias (as an effect of the "preventive" gonadectomy, and due to those healthy and "undiagnosed" intersex individuals who fly under the radar) therefore question the reliability and validity of studies suggesting higher tumor prevalence, and the practice of preventive gonadectomy, and propose “watchful waiting” instead of the con-

servative gonadectomy (Cools, Drop, Wolffenbuttel., Oosterhuis and Looijenga, 2006; Looijenga, Hersmus, Oosterhuis, Cools, Drop and Wolffenbuttel, 2007; Slowikowska-Hilczer, Szarras-Czapnik, Wolski, Oszukowska, Hilczer, Jakubowski, Walczak-Jedrzejowska, Marchlewska, Filipiak, Kaluzewski, Baka-Ostrowska, Niedzielski and Kula, 2015). We should also keep in mind that there are several mental and physical consequences of gonadectomy and genital normalising surgeries. Gonadectomy and normalisation surgeries might also result in scarring, the necessity of recurrent surgeries, dissatisfaction with the unwanted surgery and its outcome, feeling of mutilation, which all might affect mental health and cause problems such as anxiety, depression and low self-esteem (GrApSIA and Audí, 2014). As a result of gonadectomy, many intersex have lost their fertility, therefore they are deprived of the opportunity of having a biological child (GrApSIA and Audí, 2014).

In order to prevent malignant tumours but preserve possible gonadal hormone production (therefore eliminate the side-effects of the hormone replacement therapy and/or fertility issues), some studies suggest postponing gonadectomy as long as possible, desirably until the person in question comes of age and is capable of informed consent, while providing constant screening (tumour markers and imaging) and the necessary accurate follow-up (Tyutyusheva, Mancini, Baroncelli, D’Elios, Peroni, Meriggiola and Bertelloni, 2021; Knight and Tamar Mattis, 2017; Amnesty International 2017; Creighton 2001; Bauer and Truffer, 2019).

2.3) Health behaviour and social environment

The health disparities LGBTI people experience are often associated with certain health-related behaviours. Series of studies found higher levels of smoking, alcohol consumption, recreational drug use, others higher incidence of obesity and eating disorders among sexual minorities. In a comprehensive study, LGBTI people were less likely to adopt the studied health-related behaviours that were found to be associated with reduced all-cause mortality: never smoking, performing regular physical activity, consuming no or moderate amounts of alcohol, having a normal body weight, and obtaining sufficient sleep daily (Cunningham, Xu, and Town 2018). The importance of these findings originates from the possibility that higher levels of these health-risk behaviours in the LGBTI population may translate to a higher prevalence of certain risk-associated diseases.

Other behavioural and environmental factors, such as lower participation in health screening programs, and higher rates of homelessness and intimate partner violence can also affect the health of sexual minorities and put them at increased risk of adverse physical and mental health outcomes.

2.3.1) Smoking

Smoking is one of the risk factors that are more prevalent among LGBTI people than in the overall population. In several studies, sexual minority people were more likely to be cigarette smokers than their heterosexual counterparts (Cunningham et al. 2018; Jamal et al. 2018; Marti-Pastor et al. 2018; Gonzales and Henning-Smith 2017).

Examining the LGBTI population as one entity in studies makes the evaluation of tobacco use risk less accurate. Studies examining the different

subgroups separately found that tobacco-related LGBTI health inequities may be greater than previously indicated, especially among bisexual and lesbian women.

Bisexual women were found to be at an extremely elevated risk for tobacco use, even when compared with lesbian women and gay or bisexual men (and not merely to the heterosexual population). Bisexual women appear to be at the highest risk across adult LGB subgroups for using tobacco products (Emory et al. 2016).

The significance of this disparity comes from the fact that higher rates of smoking are associated with elevated risks of tobacco-related illnesses, in particular pulmonary and cardiovascular conditions (Blosnich et al. 2010; Gonzales and Henning-Smith 2017).

2.3.2) Addictions: alcohol and substance misuse

The early studies have overestimated the prevalence of alcohol and drug dependence in the LGBTI community due to methodological problems (such as recruiting the research population from bars and nightclubs and interpreting the findings as if representing the whole LGBTI community). However, alcohol and substance misuse can undeniably constitute a problem for a significant part of the sexual minority population.

Recent studies show that compared with heterosexual people, lesbian, gay, and bisexual adults have a higher prevalence of alcohol consumption (Cunningham et al. 2018). In a nationally representative US study, LGB adults were more likely to report heavy alcohol consumption: bisexual women had the highest rates, but lesbian women

were still twice more likely to be heavy drinkers compared with heterosexual women, and bisexual men were twice more likely to be heavy drinkers than heterosexual men (Gonzales et al. 2016). Sexual minority women are at particularly high risk for alcohol and drug abuse. In a US national survey, 13.3% of lesbians and 15.6% of bisexual women met the criteria for alcohol dependence compared to 2.5% of heterosexual women (McCabe et al. 2009).

The causes leading to more prevalent substance use in the LGBTI population are heterogeneous. Some use alcohol or substances as a coping strategy or as self-medication in difficult life situations. Others use alcohol and drugs to alleviate anxiety in social and sexual situations. In western societies, LGBTI-friendly bars and nightclubs have been important places for meeting friends or looking for romantic or sexual partners. In consequence, recreational drug use and excessive drinking are more accepted in the LGBTI community than in the larger society.

This unique situation of substance use can position LGBTI persons at elevated risk of exposure to potentially addictive drugs and can also make the recovery from addiction more difficult. An additional factor leading to higher rates of substance misuse is that LGBTI people are less likely to seek help, due partly to barriers in accessing services and partly to the mistrust in mental health professionals.

The greater risk for alcohol and substance use among sexual and gender minorities may be attributable to the chronic minority stress experienced by LGBTI people. The disparity in drinking and drug use is connected to exposure to victimisation – such as physical and sexual abuse, homelessness, and intimate partner violence (Drabble et al. 2013; McLaughlin et al. 2012).

Problems associated with alcohol and substance misuse are the same as for the general population: the physical, mental and social conse-

quences of addiction. In addition, decreased inhibitions and increased stamina (in the case of stimulants) might lead to higher risk taking, therefore higher rate of unsafe sexual practices – regardless of sexual orientation – which results in a higher risk of sexually transmitted infections.

The use of stimulants and psychoactive drugs when engaging in sex – also known as chemsex – is a practice in which typically certain groups of gay and bisexual men engage (although it can be found across all sexual orientations) (Lawn, Aldridge, Xia, Winstock, 2019). It is important to point out though that chemsex practises characterise only a minority of the MSM population, but that group is at risk of this practice negatively impacting their health and well-being (Maxwell et al. 2019). The concern connected with chemsex is its association with high-risk sexual behaviour (multiple sexual partners, condomless intercourses) leading to an extremely high risk of sexually transmitted infections.

Conscious unprotected anal intercourse, “bareback sex”, is a phenomenon that sometimes forms a part of identity among a minority of men who have sex with men. Different individual, social and cultural factors contribute to this behaviour, such as changed perception of HIV (instead of “a death sentence” a chronic, but manageable disease), risk attraction and transgression against “antiseptic” views of safe sex, the Internet as a facilitating medium or peer norms of unprotected sex (Berg 2009). There are findings indicating that the practice is on the increase (Wolitski 2005) and efforts to find new approaches to address bareback behaviour by targeted prevention programmes (Carballo-Diéguez et al. 2009).

2.3.3) Physical activity and sleep quality

In the case of physical activity, sexual orientation disparities are less consistent. Some studies found higher rates of limited physical activity among sexual minorities, but others found similar exercise levels between sexual minority and heterosexual men. Several studies found lower rates among sexual-minority adolescents and young adults (Calzo et al. 2014; Luk et al. 2018; Rosario et al. 2016). The number of studies examining health disparities by gender identity is even more limited, but there are some results indicating that physical inactivity represents important health issues for many transgender community members (Reisner et al. 2013). It is safe to state, therefore, that even if sexual and gender minority people have the same amount of exercise as the heterosexual population, it is still lower than the recommended (at least 150 minutes of moderate-intensity aerobic physical activity or 75 minutes of vigorous-intensity physical activity, or an equivalent combination each week).

Sexual minority women and gay men may have poorer sleep quality (trouble falling or staying asleep or taking medication to help sleep) compared with their straight counterparts (Galinsky et al. 2018).

2.3.4) Eating- and diet related disorders

Sexual minorities are more likely to have disordered eating and diet-related problems.

Lesbian and bisexual women are more at risk for obesity than heterosexual women. They tend to have a greater body mass index (BMI) and a higher percentage of them have a BMI over 30

and this difference, beginning in adolescence, is consistent across the lifespan (Eliason et al. 2015).

Bisexual men also have a greater risk of overweight and obesity (Caceres et al. 2018; Dyar et al. 2019) and are at greater risk of eating disorders, just like gay men (Calzo et al. 2017). Unhealthy weight control practises (such as purging or vomiting after binge eating) can lead to thinness, but just as often lead to obesity, and most frequently, to fluctuating weight.

2.3.5) Screening participation

The lower participation in health screening programs also contributes to health disparities experienced by LGBTI people. Sexual minority people are less likely to use preventive cancer screening services, such as mammography or Pap-test (Papapanicolaou-test, smear test) (Cochran et al. 2001). This may be due to barriers in accessing healthcare (as lack of health insurance) or caused by previous negative experiences of prejudice and discrimination that can lead to avoidance of routine screening.

Lesbian and bisexual women are less likely to participate in cervical cancer screening than their heterosexual peers (Tracy, Schluterman, and Greenberg 2013). They themselves may underestimate their risk of cervical cancer or sometimes they are mistakenly informed by a healthcare professional that they don't need a smear test (Curmi, Peters, and Salamonson 2014). Lesbians are often thought to be at lower risk of cervical cancer than heterosexual women. They may be however at risk of HPV infection – having penetrative sex with men or having done so in the past. Others may never have had sex with a man, but still can contract HPV and STIs from their female partner from their sexual practice (e.g., oral sex or sharing sex toys without the use of a condom) (Bauer and Welles 2001). Therefore, regular screening is important for sexual

minority women and the smear test should be offered to lesbian and bisexual women the same way as to any woman.

Sexual minority women have higher rates of breast and reproductive cancer risk factors such as obesity, smoking, alcohol use and nulliparity (never having given birth) compared to heterosexual women (Cochran et al. 2001). Moreover, lesbian and bisexual women have lower mammographic screening rates compared to heterosexual women (Austin et al. 2013; Kerker, Mostashari, and Thorpe 2006). This disparity found in mammography screening adds to other behavioural risk factors and puts sexual minority women at increased risk of breast cancer.

Adherence to colorectal cancer screening seems to be better in the LGBTI population than to other screening programs. Some studies (McElroy, Wintemberg, and Williams 2015) found no difference in participation in colorectal cancer screening by sexual orientation. Other studies (Charkhchi, Schabath, and Carlos 2019) found that lesbian or gay individuals had higher rates of screening compared with straight and bisexual individuals, though transgender individuals had significantly lower screening rates.

Trans men are less likely to have Pap tests than cisgender women, despite the high prevalence of HPV infection among them and the fact that the majority of them have a cervix present for a substantial portion of their life (Peitzmeier et al. 2014).

Owing to improved public awareness and accessibility, HIV testing has increased in the at-risk population. LGBTI people participate in HIV screening in greater numbers than the heterosexual population. This, however, still does not meet the frequency recommended by public health guidelines. In the US, CDC guidelines recommend testing for HIV annually, but 29% of gay men aged 15–44 have never been tested (Febo-Vazquez, Copen, and Daugherty 2018). In

Europe, apart from individual studies showing similarly low attendance among MSM (Hoyos et al. 2020; Mikolajczak, Hospers, and Kok 2006) CDC surveillance reports that – while the actual HIV testing attendance by sexual orientation cannot be examined – the data suggests low uptake of HIV testing by those most at risk (ECDC/WHO Europe 2014).

2.3.6) Intimate partner violence

Intimate partner violence, also called domestic violence or partner abuse, is physical, verbal, emotional and sexual abuse by a current or former partner in an intimate relationship.

Psychological violence is the most common, and may have many forms, like threats, humiliation, intimidation, social isolation or financial control (see more details in Chapter 5.3.3, Domestic violence, intimate partner violence). Intimate partner violence can occur in heterosexual and same-sex relationships alike, though the risk may be higher in same-sex couples and bisexual people have especially high rates of partner abuse (Walters, Chen, and Breiding 2013). LGBTI people experience domestic violence at least as often than their heterosexual counterparts.

In an abusive relationship the abusive partner consistently aims to control their partner through various methods, in heterosexual and same-sex relationships alike. LGBTI domestic violence has unique characteristics though. For many survivors the threat of forced outing – disclosing the partner's sexual orientation or gender identity to others – represents a form of psychological violence. Concerns about coming out can also form a barrier when seeking help – the survivor fears to disclose the violence as it entails the disclosure of the relationship too.

Sexual and gender minority people in general experience violence more often than hetero-

sexual and cisgender people throughout their lives. This violence takes many forms – from physical abuse by parents, school bullying and family rejection to harassment, discrimination and hate crimes – and typically occurs within the context of homo-, bi-, trans-, intersexphobia and enbyphobia. These experiences encumber seeking help as LGBTI people may have learned to anticipate discrimination, or simply an inadequate response when appealing for help.

Intimate partner violence has been associated with adverse health effects (Devries et al. 2013). Injury or death resulting from direct physical violence are less common, fortunately; however, the chronic consequences of mental stress can result in serious negative health outcomes. Intimate partner abuse was related with a range of physical, mental, and behavioural health problems in a sample of gay and bisexual men (Houston and McKirnan 2007). There is little data on women’s health outcomes from same-sex abusive relationships, but there is no reason to assume that the consequences are less serious than those experienced by women who suffered intimate partner violence from male perpetrators.

2.3.7) Homelessness

LGBTI youth have an increased risk of becoming homeless. Around 40% of homeless youth in the US are LGBT (Durso and Gates 2012) while a scoping study conducted by a UK LGBTQ+ youth homelessness charity found that number to be

24% in the UK (Albert Kennedy Trust 2015). Most typically conflicts with parents or guardians lead to homelessness, and those often occur on homo- or transphobic grounds. Some of LGBTI youth are forced to leave their homes when parents discover their sexual orientation or gender identity. In other cases, leaving home is a voluntary decision if it is perceived as a better alternative to the homo- or transphobic harassment or to coercion to participate in “conversion” or “reparative” therapies.

On the streets sexual minority youth find themselves in a vulnerable situation, facing additional hazards that impact homeless LGBTI people. They are particularly exposed to depression, PTSD, and psychosomatic illnesses and are at greater risk of substance and alcohol misuse (McLaughlin et al. 2012; Whitbeck et al. 2004). Trading sex for food, shelter, drugs, alcohol or money (“survival sex”) and, in some cases, prostitution are often the last resort for homeless youth, and LGB adolescents are particularly vulnerable to this kind of sexual victimisation (Cochran et al. 2002). This in turn puts them at increased risk of STIs and sexual exploitation (Gangamma et al. 2008). To all this is added the problem of accessing health service, as not only the lack of health insurance, but sometimes lack of proper identification and legal restrictions associated with being underage makes access to medical care more difficult for homeless LGBTI youth. They may also experience obstacles when accessing shelters or other homeless services. Experiencing prejudice from staff, service users or other homeless people can compound the difficulties faced by LGBTI homeless people.

References

- Albert Kennedy Trust. (2015). *LGBT Youth Homelessness: A UK National Scoping of Cause, Prevalence, Response, and Outcome*. UK Albert Kenny Trust.
- APA. (2009). *Report of the American Psychological Association Task Force on Appropriate Therapeutic Responses to Sexual Orientation*. APA Task Force on Appropriate Therapeutic Responses to Sexual Orientation.
- Amnesty International. (2017). ‘*First, Do No Harm: Ensuring the Rights of Children with Variations of Sex Characteristics in Denmark and Germany Report*’. <https://www.amnesty.org/download/Documents/EUR0160862017ENGLISH.PDF>
- Austin, S. Bryn, Mathew J. Pazaris, Lauren P. Nichols, Deborah B., Esther K. Wei, Donna, S. (2013). “An Examination of Sexual Orientation Group Patterns in Mammographic and Colorectal Screening in a Cohort of U.S. Women.” *Cancer Causes & Control* 24(3). 539–47. <https://doi.org/10.1007/s10552-012-9991-0>.
- Kesha, B.R., Oranuba, E., Werts, N., Edwards, L. V. (2017). “Addressing healthcare Disparities Among Sexual Minorities.” *Obstetrics and Gynecology Clinics of North America* 44(1). 71–80. <https://doi.org/10.1016/j.ogc.2016.11.003>.
- Bauer, Greta R., Seth L. Welses. (2001). “Beyond Assumptions of Negligible Risk: Sexually Transmitted Diseases and Women Who Have Sex With Women.” *American Journal of Public Health*. 91(8). 1282–86. <https://doi.org/10.2105/AJPH.91.8.1282>.
- Bauer M., Truffer D. (2019). *Intersex Genital Mutilations Human Rights Violations Of Children With Variations Of Reproductive Anatomy*. <https://intersex.shadowreport.org/public/2019-CRC-Malta-NGO-Zwischengeschlecht-Intersex-IGM.pdf>
- Beach, Lauren B., Tom A. Elasy, and Gilbert Gonzales. (2018). “Prevalence of Self-Reported Diabetes by Sexual Orientation: Results from the 2014 Behavioral Risk Factor Surveillance System.” *LGBT Health* 5(2).121–30. <https://doi.org/10.1089/lgbt.2017.0091>.
- Beren, Susan E., Helen A. Hayden, Denise E. Wilfley, Carlos M. Grilo. (1996). “The Influence of Sexual Orientation on Body Dissatisfaction in Adult Men and Women.” *The International Journal of Eating Disorders* 20(2). 135–41..
- Berg, Rigmor C. (2009). “Barebacking: A Review of the Literature.” *Archives of Sexual Behavior* 38(5). 754–64. <https://doi.org/10.1007/s10508-008-9462-6>.
- Blosnich, John, Jarrett, Traci, Horn, Kimberly. (2010). “Disparities in Smoking and Acute Respiratory Illnesses Among Sexual Minority Young Adults.” *Lung* 188(5). 401–7. <https://doi.org/10.1007/s00408-010-9244-5>.
- Boehmer, Ulrike, Al Ozonoff, and Xiaopeng Miao. (2011). “An Ecological Analysis of Colorectal Cancer Incidence and Mortality: Differences by Sexual Orientation.” *BMC Cancer* 11(1). 400. <https://doi.org/10.1186/1471-2407-11-400>.
- Boehmer, Ulrike, Xiaopeng Miao, and Al Ozonoff. (2011). “Cancer Survivorship and Sexual Orientation.” *Cancer* 117(16). 3796–3804. <https://doi.org/10.1002/cncr.25950>.
- Boehmer, Ulrike, Xiaopeng Miao, Crystal Linkletter, and Melissa A. Clark. (2014). “Health Conditions in Younger, Middle, and Older Ages: Are There Differences by Sexual Orientation?” *LGBT Health* 1(3). 168–76. <https://doi.org/10.1089/lgbt.2013.0033>.
- Brandenburg, Dana L., Alicia K. Matthews, Timothy P. Johnson, and Tonda L. Hughes. (2007). “Breast

Cancer Risk and Screening: A Comparison of Lesbian and Heterosexual Women.” *Women & Health* 45(4). 109–30. https://doi.org/10.1300/J013v45n04_06.

- Caceres, Billy A., Abraham A. Brody, Perry N. Halkitis, Caroline Dorsen, Gary Yu, and Deborah A. Chyun. (2018). “Sexual Orientation Differences in Modifiable Risk Factors for Cardiovascular Disease and Cardiovascular Disease Diagnoses in Men.” *LGBT Health* 5(5). 284–94. <https://doi.org/10.1089/lgbt.2017.0220>.
- Calzo, Jerel P., Aaron J. Blashill, Tiffany A. Brown, and Russell L. Argenal. (2017). “Eating Disorders and Disordered Weight and Shape Control Behaviors in Sexual Minority Populations.” *Current Psychiatry Reports* 19(8). 49. <https://doi.org/10.1007/s11920-017-0801-y>.
- Calzo, Jerel P., Andrea L. Roberts, Heather L. Corliss, Emily A. Blood, Emily Kroshus, and S. Bryn Austin. (2014). “Physical Activity Disparities in Heterosexual and Sexual Minority Youth Ages 12–22 Years Old: Roles of Childhood Gender Nonconformity and Athletic Self-Esteem.” *Annals of Behavioral Medicine* 47(1). 17–27. <https://doi.org/10.1007/s12160-013-9570-y>.
- Carballo-Diéguez, A., A. Ventuneac, J. Bauermeister, G. W. Dowsett, C. Dolezal, R. H. Remien, I. Balan, and M. Rowe. (2009). “Is ‘Bareback’ a Useful Construct in Primary HIV-prevention? Definitions, Identity and Research.” *Culture, Health & Sexuality* 11(1). 51–65. <https://doi.org/10.1080/13691050802419467>.
- Charkhchi, Paniz, Matthew B. Schabath, and Ruth C. Carlos. (2019). “Modifiers of Cancer Screening Prevention Among Sexual and Gender Minorities in the Behavioral Risk Factor Surveillance System.” *Journal of the American College of Radiology* 16(4). 607–20.
- Chew, Denise, Jemma Anderson, Katrina Williams, Tamara May, and Kenneth Pang. 2018. “Hormonal Treatment in Young People With Gender Dysphoria: A Systematic Review.” *Pediatrics* 141(4). <https://doi.org/10.1542/peds.2017-3742>.
- Creighton, Sara. (2001). Surgery for Intersex. *Journal of the Royal Society of Medicine*, 94(5), 218–220. <https://doi.org/10.1177/014107680109400505>
- Cochran, Bryan N., Angela J. Stewart, Joshua A. Ginzler, and Ana Mari Cauce. (2002). “Challenges Faced by Homeless Sexual Minorities: Comparison of Gay, Lesbian, Bisexual, and Transgender Homeless Adolescents With Their Heterosexual Counterparts.” *American Journal of Public Health* 92(5). 773–77. <https://doi.org/10.2105/AJPH.92.5.773>.
- Cochran, Susan D., Jack Drescher, Eszter Kismödi, Alain Giami, Claudia García-Moreno, Elham Atalla, Adele Marais, Elisabeth Meloni Vieira, and Geoffrey M. Reed. (2020). “Proposed Declassification of Disease Categories Related to Sexual Orientation in the International Statistical Classification of Diseases and Related Health Problems (ICD-11).” *FOCUS* 18(3). 351–57. <https://doi.org/10.1176/appi.focus.18303>.
- Cochran, Susan D., Vickie M. Mays, Deborah J. Bowen, Susan Gage, Deborah Bybee, Susan J. Roberts, Robert S. Goldstein, Ann Robison, Elizabeth J. Rankow, and Jocelyn White. (2001). “Cancer-Related Risk Indicators and Preventive Screening Behaviors among Lesbians and Bisexual Women.” *American Journal of Public Health* 91(4). 591–97. <https://doi.org/10.2105/AJPH.91.4.591>.
- Conron, Kerith J., Matthew J. Mimiaga, and Stewart J. Landers. (2010). “A Population-Based Study of Sexual Orientation Identity and Gender Differences in Adult Health.” *American Journal of Public Health* 100(10). 1953–60. <https://doi.org/10.2105/AJPH.2009.174169>.
- Cunningham, Timothy J., Fang Xu, and Machell Town. (2018). “Prevalence of Five Health-Related Behaviors for Chronic Disease Prevention Among Sexual and Gender Minority Adults — 25 U.S. States and Guam, 2016.” *Morbidity and Mortality Weekly Report* 67(32). 888–93. <https://doi.org/10.15585/mmwr.mm6732a4>.
- Curmi, Claire, Kath Peters, and Yenna Salamonson. (2014). “Lesbians’ Attitudes and Practices of Cervical Cancer Screening: A Qualitative Study.” *BMC Women’s Health* 14(1). 2. <https://doi.org/10.1186/s12905-014-0153-2>.

- Davy, Zowie, and Michael Toze. (2018). “What Is Gender Dysphoria? A Critical Systematic Narrative Review.” *Transgender Health* 3(1). 159–69.
- Devries, Karen M., Joelle Y. Mak, Loraine J. Bacchus, Jennifer C. Child, Gail Falder, Max Petzold, Jill Astbury, and Charlotte H. Watts. (2013). “Intimate Partner Violence and Incident Depressive Symptoms and Suicide Attempts: A Systematic Review of Longitudinal Studies.” *PLoS Medicine* 10(5). <https://doi.org/10.1371/journal.pmed.1001439>.
- Dicken, Bryan J., Deborah F. Billmire, Mark, Krailo, Caihong Xia, Furqan Shaikh, John W. Cullen, Thomas A. Olson, Farzana Pashankar, Marcio H. Malogolowkin, James F. Amatruda, Frederick, Rescorla, Rachel A. Egler, Jonathan H. Ross, Carlos Rodriguez-Galindo and Lindsay Frazier. (2018). “Gonadal dysgenesis is associated with worse outcomes in patients with ovarian nondysgerminomatous tumors: A report of the Children's Oncology Group”. *Pediatric blood & cancer*, 65(4)
- Diemer, Elizabeth W., Julia D. Grant, Melissa A. Munn-Chernoff, David A. Patterson, and Alexis E. Duncan. (2015). “Gender Identity, Sexual Orientation, and Eating-Related Pathology in a National Sample of College Students.” *Journal of Adolescent Health* 57(2). 144–49. <https://doi.org/10.1016/j.jadohealth.2015.03.003>.
- Dilley, Julia A., Katrina Wynkoop Simmons, Michael J. Boysun, Barbara A. Pizacani, and Mike J. Stark. (2010). “Demonstrating the Importance and Feasibility of Including Sexual Orientation in Public Health Surveys: Health Disparities in the Pacific Northwest.” *American Journal of Public Health* 100(3). 460–67. <https://doi.org/10.2105/AJPH.2007.130336>.
- Drabble, Laurie, Karen F. Trocki, Tonda L. Hughes, Rachael A. Korcha, and Anne E. Lown. (2013). “Sexual Orientation Differences in the Relationship between Victimization and Hazardous Drinking among Women in the National Alcohol Survey.” *Psychology of Addictive Behaviors* 27(3). 639–48. <https://doi.org/10.1037/a0031486>.
- Dragon, Christina N., Paul Guerino, Erin Ewald, and Alison M. Laffan. (2017). “Transgender Medicare Beneficiaries and Chronic Conditions: Exploring Fee-for-Service Claims Data.” *LGBT Health* 4(6). 404–11. <https://doi.org/10.1089/lgbt.2016.0208>.
- Drescher, Jack. (2015). “Out of DSM: Depathologizing Homosexuality.” *Behavioral Sciences* 5(4). 565–75. <https://doi.org/10.3390/bs5040565>.
- Durso, Laura E., and Gary J. Gates. (2012). *Serving Our Youth: Findings from a National Survey of Service Providers Working with Lesbian, Gay, Bisexual, and Transgender Youth Who Are Homeless or At Risk of Becoming Homeless*. Los Angeles: The Williams Institute with True Colors Fund and The Palette Fund.
- Dyar, Christina, Tenille C. Taggart, Craig Rodriguez-Seijas, Ronald G. Thompson, Jennifer C. Elliott, Deborah S. Hasin, and Nicholas R. Eaton. (2019). “Physical Health Disparities Across Dimensions of Sexual Orientation, Race/Ethnicity, and Sex: Evidence for Increased Risk Among Bisexual Adults.” *Archives of Sexual Behavior* 48(1). 225–42. <https://doi.org/10.1007/s10508-018-1169-8>.
- ECDC/WHO Europe. (2014). *HIV/AIDS Surveillance in Europe 2013*. Stockholm: European Centre for Disease Prevention and Control.
- Eliason, Michele J., Natalie Ingraham, Sarah C. Fogel, Jane A. McElroy, Jennifer Lorvick, D. Richard Mauery, and Suzanne Haynes. (2015). “A Systematic Review of the Literature on Weight in Sexual Minority Women.” *Women’s Health Issues* 25(2). 162–75. <https://doi.org/10.1016/j.whi.2014.12.001>.
- Emory, Kristen, Yoonsang Kim, Francisco Buchting, Lisa Vera, Jidong Huang, and Sherry L. Emery. (2016). “Intragroup Variance in Lesbian, Gay, and Bisexual Tobacco Use Behaviors: Evidence That Subgroups Matter, Notably Bisexual Women.” *Nicotine & Tobacco Research* 18(6). 1494–1501. <https://doi.org/10.1093/ntr/ntv208>.
- European Union: *European Parliament, European Parliament Resolution on Declaration of the EU as an*

- LGBTIQ Freedom Zone. https://www.europarl.europa.eu/doceo/document/TA-9-2021-0089_EN.pdf
- Everett, Bethany, and Stefanie Mollborn. (2013). "Differences in Hypertension by Sexual Orientation Among U.S. Young Adults." *Journal of Community Health* 38(3). 588–96. <https://doi.org/10.1007/s10900-013-9655-3>.
 - Falhammar, Henrik, Hedi Claahsen-van der Grinten, Nicole Reisch, Jolanta Slowikowska-Hilczler, Anna Nordenström, Robert Roehle, Claire Bouvattier, Baudewijntje P. C. Kreukels, and Birgit Köhler, and dsd-LIFE group. (2018). "Health status in 1040 adults with disorders of sex development (DSD): a European multicenter study" *Endocrine connections* 7(3). 466–78. <https://doi.org/10.1530/EC-18-0031>
 - Fallat, Mary E., and Patricia K. Donahoe. (2006). "Intersex genetic anomalies with malignant potential". *Current opinion in pediatrics* 18(3) 305–311. <https://doi.org/10.1097/01.mop.0000193316.60580.d7>
 - Farmer, Grant W., Jennifer M. Jabson, Kathleen K. Bucholz, and Deborah J. Bowen. (2013). "A Population-Based Study of Cardiovascular Disease Risk in Sexual-Minority Women." *American Journal of Public Health* 103(10). 1845–50. <https://doi.org/10.2105/AJPH.2013.301258>.
 - Febo-Vazquez, Isaedmarie, Casey E. Copen, and Jill Daugherty. (2018). "Main Reasons for Never Testing for HIV Among Women and Men Aged 15-44 in the United States, 2011-2015." *National Health Statistics Reports* (107). 1–12.
 - Fredriksen-Goldsen, Karen I., Hyun-Jun Kim, Susan E. Barkan, Anna Muraco, and Charles P. Hoy-Ellis. (2013). "Health Disparities Among Lesbian, Gay, and Bisexual Older Adults: Results From a Population-Based Study." *American Journal of Public Health* 103(10). 1802–9. <https://doi.org/10.2105/AJPH.2012.301110>.
 - Galinsky, Adena M., Brian W. Ward, Sarah S. Joestl, and James M. Dahlhamer. (2018). "Sleep Duration, Sleep Quality, and Sexual Orientation: Findings from the 2013-2015 National Health Interview Survey." *Sleep Health* 4(1). 56–62. <https://doi.org/10.1016/j.sleh.2017.10.004>.
 - Gangamma, Rashmi, Natasha Slesnick, Paula Toviessi, and Julianne Serovich. (2008). "Comparison of HIV Risks among Gay, Lesbian, Bisexual and Heterosexual Homeless Youth." *Journal of Youth and Adolescence* 37(4). 456–64. <https://doi.org/10.1007/s10964-007-9171-9>.
 - Gonzales, Gilbert, and Carrie Henning-Smith. (2017). "Health Disparities by Sexual Orientation: Results and Implications from the Behavioral Risk Factor Surveillance System." *Journal of Community Health* 42(6). 1163–72. <https://doi.org/10.1007/s10900-017-0366-z>.
 - Gonzales, Gilbert, Julia Przedworski, and Carrie Henning-Smith. (2016). "Comparison of Health and Health Risk Factors Between Lesbian, Gay, and Bisexual Adults and Heterosexual Adults in the United States: Results From the National Health Interview Survey." *JAMA Internal Medicine* 176(9). 1344. <https://doi.org/10.1001/jamainternmed.2016.3432>.
 - Grant, Jaime M., Lisa A. Mottet, Justin Tanis, Jack Harrison, Jody L. Herman, and Mara Keisling. (2011). *Injustice at Every Turn: A Report of the National Transgender Discrimination Survey*. Washington: National Center for Transgender Equality and National Gay and Lesbian Task Force.
 - GrApSIA and Audí Laura. (2014). *Past Experiences of Adults with Disorders of Sex Development*. In *Endocrine Development* (pp. 138-48). S. KARGER AG. <https://doi.org/10.1159/000363639>
 - Grossman, Arnold H., and Anthony R. D'Augelli. (2007). "Transgender Youth and Life-Threatening Behaviors." *Suicide and Life-Threatening Behavior* 37(5). 527–37. <https://doi.org/10.1521/suli.2007.37.5.527>.
 - Haldeman, Douglas C. (2002). "Therapeutic Antidotes: Helping Gay and Bisexual Men Recover from Conversion Therapies." *Journal of Gay & Lesbian Psychotherapy* 5(3–4). 117–30. https://doi.org/10.1300/J236v05n03_08.
 - Heck, Julia E., and Judith S. Jacobson. (2006). "Asthma Diagnosis Among Individuals in Same-Sex Relationships." *Journal of Asthma* 43(8). 579–84. <https://doi.org/10.1080/02770900600878289>.
 - Houston, Eric, and David J. McKirnan. (2007). "Intimate Partner Abuse among Gay and Bisexual Men: Risk Correlates and Health Outcomes." *Journal of Urban Health* 84(5). 681–90. <https://doi.org/10.1007/s11524-007-9188-0>.
 - Hoyos, Juan, Kostas Koutentakis, Tomás Maté, Jose Pulido, Luis Sordo, Juan-Miguel Guerras, and María-José Belza. (2020). "High Risk Men Who Have Sex with Men in Spain Are Reporting Low Intentions of Actively Seeking HIV Testing: Results from a Cross-Sectional Study." *BMC Public Health* 20(1).398. <https://doi.org/10.1186/s12889-020-8440-3>.
 - Hughes, Tonda L., Cindy B. Veldhuis, Laurie A. Drabble, and Sharon C. Wilsnack. (2020). "Research on Alcohol and Other Drug (AOD) Use among Sexual Minority Women: A Global Scoping Review" *PLOS ONE* 15(3). <https://doi.org/10.1371/journal.pone.0229869>.
 - Hughto, Jaclyn M. W., Emily K. Quinn, Michael S. Dunbar, Adam J. Rose, Theresa I. Shireman, and Guneet K. Jasuja. (2021). "Prevalence and Co-Occurrence of Alcohol, Nicotine, and Other Substance Use Disorder Diagnoses Among US Transgender and Cisgender Adults." *JAMA Network Open* 4(2). <https://doi.org/10.1001/jamanetworkopen.2020.36512>.
 - Institute of Medicine (U.S.), (2011). *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*. Washington, DC: National Academies Press.
 - Jamal, Ahmed, Elyse Phillips, Andrea S. Gentzke, David M. Homa, Stephen D. Babb, Brian A. King, and Linda J. Neff. (2018). "Current Cigarette Smoking Among Adults — United States, 2016." *Morbidity and Mortality Weekly Report* 67(2). 53–59. <https://doi.org/10.15585/mmwr.mm6702a1>.
 - Juster, Robert-Paul, Mark L. Hatzenbuehler, Adrianna Mendrek, James G. Pfaus, Nathan Grant Smith, Philip Jai Johnson, Jean-Philippe Lefebvre-Louis, Catherine Raymond, Marie-France Marin, Shireen Sindi, Sonia J. Lupien, and Jens C. Pruessner. (2015). "Sexual Orientation Modulates Endocrine Stress Reactivity." *Biological Psychiatry* 77(7). 668–76. <https://doi.org/10.1016/j.biopsych.2014.08.013>.
 - Kerker, Bonnie D., Farzad Mostashari, and Lorna Thorpe. (2006). "Healthcare Access and Utilization among Women Who Have Sex with Women: Sexual Behavior and Identity." *Journal of Urban Health* 83(5). 970–79. <https://doi.org/10.1007/s11524-006-9096-8>.
 - King, Michael, Eamonn McKeown, James Warner, Angus Ramsay, Katherine Johnson, Clive Cort, Lucie Wright, Robert Blizzard, and Oliver Davidson. (2003). "Mental Health and Quality of Life of Gay Men and Lesbians in England and Wales: Controlled, Cross-Sectional Study." *British Journal of Psychiatry* 183(6). 552–58. <https://doi.org/10.1192/03-207>.
 - King, Michael, Joanna Semlyen, Sharon See Tai, Helen Killaspy, David Osborn, Dmitri Popelyuk, and Irwin Nazareth. (2008). "A Systematic Review of Mental Disorder, Suicide, and Deliberate Self Harm in Lesbian, Gay and Bisexual People." *BMC Psychiatry* 8(1). 70. <https://doi.org/10.1186/1471-244X-8-70>.
 - Knight, K. and Tamar Mattis, S. (2017). "I Want to Be Like Nature Made Me" *Medically Unnecessary Surgeries on Intersex Children in the US*. Human Rights Watch and InterACT. <https://www.hrw.org/report/2017/07/25/i-want-be-nature-made-me/medically-unnecessary-surgeries-intersex-children-us>
 - Landers, Stewart J., Matthew J. Mimiaga, and Kerith J. Conron. (2011). "Sexual Orientation Differences in Asthma Correlates in a Population-Based Sample of Adults." *American Journal of Public Health* 101(12). 2238–41. <https://doi.org/10.2105/AJPH.2011.300305>.
 - Lawn, W., Aldridge, A., Xia, R., & Winstock, A. R. (2019). Substance-Linked Sex in Heterosexual, Homosexual, and Bisexual Men and Women: An Online, Cross-Sectional "Global Drug Survey" Report. *The journal of sexual medicine*. 16(5). 721–732. <https://doi.org/10.1016/j.jsxm.2019.02.018>
 - Liu, Richard T., Ana E. Sheehan, Rachel F. L. Walsh, Christina M. Sanzari, Shayna M. Cheek, and Evelyn M. Hernandez. (2019). "Prevalence and Correlates of Non-Suicidal Self-Injury among Lesbian, Gay, Bisexual, and Transgender Individuals: A Systematic Review and Meta-Analysis." *Clinical Psychology Review* 74. 101-783. <https://doi.org/10.1016/j.cpr.2019.101783>.
 - Looijenga, Leendert H., Remko Hersmus, J. Wolter Oosterhuis, Martine Cools, Stenvert Drop L. and Katja P. Wolffenbuttel. (2007). Tumor risk in disorders of sex development (DSD). *Best practice & re-*

search. *Clinical endocrinology & metabolism*. 21(3). 480–495. <https://doi.org/10.1016/j.beem.2007.05.001>

- Luk, Jeremy W., Jacob M. Miller, Stephen E. Gilman, Leah M. Lipsky, Denise L. Haynie, and Bruce G. Simons-Morton. (2018). “Sexual Minority Status and Adolescent Eating Behaviors, Physical Activity, and Weight Status.” *American Journal of Preventive Medicine* 55(6). 839–47. <https://doi.org/10.1016/j.amepre.2018.07.020>.
- Machalek, Dorothy A., Mary Poynten, Fengyi Jin, Christopher K. Fairley, Annabelle Farnsworth, Suzanne M. Garland, Richard J. Hillman, Kathy Petoumenos, Jennifer Roberts, Sepehr N. Tabrizi, David J. Templeton, and Andrew E. Grulich. (2012). “Anal Human Papillomavirus Infection and Associated Neoplastic Lesions in Men Who Have Sex with Men: A Systematic Review and Meta-Analysis.” *The Lancet Oncology* 13(5). 487–500. [https://doi.org/10.1016/S1470-2045\(12\)70080-3](https://doi.org/10.1016/S1470-2045(12)70080-3).
- Marti-Pastor, Marc, Gloria Perez, Danielle German, Angels Pont, Olatz Garin, Jordi Alonso, Mercè Gotsens, and Montse Ferrer. (2018). “Health-Related Quality of Life Inequalities by Sexual Orientation: Results from the Barcelona Health Interview Survey” *PLOS ONE* 13(1) <https://doi.org/10.1371/journal.pone.0191334>.
- Matthews, Derrick D., and Joseph G. L. Lee. (2014). “A Profile of North Carolina Lesbian, Gay, and Bisexual Health Disparities, 2011.” *American Journal of Public Health* 104(6). 98–105. <https://doi.org/10.2105/AJPH.2013.301751>.
- Maxwell, Steven, Maryam Shahmanesh, and Mitzy Gafos. (2019). “Chemsex Behaviours among Men Who Have Sex with Men: A Systematic Review of the Literature.” *International Journal of Drug Policy* 63. 74–89. <https://doi.org/10.1016/j.drugpo.2018.11.014>.
- Mays, Vickie M., Robert-Paul Juster, Timothy J. Williamson, Teresa E. Seeman, and Susan D. Cochran. (2018). “Chronic Physiologic Effects of Stress Among Lesbian, Gay, and Bisexual Adults: Results From the National Health and Nutrition Examination Survey.” *Psychosomatic Medicine* 80(6). 551–63. <https://doi.org/10.1097/PSY.0000000000000600>.
- McBee-Strayer, Sandra M., and James R. Rogers. (2002). “Lesbian, Gay, and Bisexual Suicidal Behavior: Testing a Constructivist Model.” *Suicide and Life-Threatening Behavior* 32(3). 272–83. <https://doi.org/10.1521/suli.32.3.272.22171>.
- McCabe, Sean Esteban, Tonda L. Hughes, Wendy B. Bostwick, Brady T. West, and Carol J. Boyd. (2009). “Sexual Orientation, Substance Use Behaviors and Substance Dependence in the United States.” *Addiction* 104(8). 1333–45. <https://doi.org/10.1111/j.1360-0443.2009.02596.x>.
- McElroy, Jane A., Jenna J. Wintemberg, and Amy Williams. (2015). “Comparison of Lesbian and Bisexual Women to Heterosexual Women’s Screening Prevalence for Breast, Cervical, and Colorectal Cancer in Missouri.” *LGBT Health* 2(2). 188–92. <https://doi.org/10.1089/lgbt.2014.0119>.
- McLaughlin, Katie A., Mark L. Hatzenbuehler, Ziming Xuan, and Kerith J. Conron. (2012). “Disproportionate Exposure to Early-Life Adversity and Sexual Orientation Disparities in Psychiatric Morbidity.” *Child Abuse & Neglect* 36(9). 645–55. <https://doi.org/10.1016/j.chiabu.2012.07.004>.
- Meyer, Ian H. (2003). Prejudice, Social Stress, and Mental Health in Lesbian, Gay, and Bisexual Populations: Conceptual Issues and Research Evidence. *Psychological Bulletin* 129(5). 674–97. <https://doi.org/10.1037/0033-2909.129.5.674>.
- Mikolajczak, Jochen, Harm J. Hospers, and Gerjo Kok. (2006). “Reasons for Not Taking an HIV-Test Among Untested Men Who Have Sex with Men: An Internet Study.” *AIDS and Behavior* 10(4). 431–35. <https://doi.org/10.1007/s10461-006-9068-8>.
- Parker, Lacie L., and Jennifer A. Harriger. (2020). “Eating Disorders and Disordered Eating Behaviors in the LGBT Population: A Review of the Literature.” *Journal of Eating Disorders* 8(1). 51. <https://doi.org/10.1186/s40337-020-00327-y>.
- Patterson, Joanne G., and Jennifer M. Jabson. (2018). “Sexual Orientation Measurement and Chron-

ic Disease Disparities: National Health and Nutrition Examination Survey, 2009–2014.” *Annals of Epidemiology* 28(2):72–85. <https://doi.org/10.1016/j.annepidem.2017.12.001>

- Peitzmeier, Sarah M., Karishma Khullar, Sari L. Reisner, and Jennifer Potter. (2014). “Pap Test Use Is Lower Among Female-to-Male Patients Than Non-Transgender Women.” *American Journal of Preventive Medicine* 47(6). 808–12. <https://doi.org/10.1016/j.amepre.2014.07.031>
- Quinn, Gwendolyn P., Julian A. Sanchez, Steven K. Sutton, Susan T. Vadaparampil, Giang T. Nguyen, B. Lee Green, Peter A. Kanetsky, and Matthew B. Schabath. (2015). “Cancer and Lesbian, Gay, Bisexual, Transgender/Transsexual, and Queer/Questioning (LGBTQ) Populations: Cancer and Sexual Minorities.” *CA: A Cancer Journal for Clinicians* 65(5). 384–400. <https://doi.org/10.3322/caac.21288>.
- Reilly, A. (2006). “Is Internalized Homonegativity Related to Body Image?” *Family and Consumer Sciences Research Journal* 35(1). 58–73. <https://doi.org/10.1177/1077727X06289430>
- Reisner, Sari L., Kristi E. Gamarel, Emilia Dunham, Ruben Hopwood, and Sel Hwahng. (2013). “Female-to-Male Transmasculine Adult Health: A Mixed-Methods Community-Based Needs Assessment.” *Journal of the American Psychiatric Nurses Association* 19(5). 293–303. <https://doi.org/10.1177/1078390313500693>
- Roberts, Andrea L., Margaret Rosario, Heather L. Corliss, Karestan C. Koenen, and S. Bryn Austin. (2012). “Elevated Risk of Posttraumatic Stress in Sexual Minority Youths: Mediation by Childhood Abuse and Gender Nonconformity.” *American Journal of Public Health* 102(8). 1587–93. <https://doi.org/10.2105/AJPH.2011.300530>
- Robinson, K., Ky Galloway, S. Bewley, and C. Meads. (2017). “Lesbian and Bisexual Women’s Gynaecological Conditions: A Systematic Review and Exploratory Meta-analysis.” *BJOG: An International Journal of Obstetrics & Gynaecology* 124(3). 381–92. <https://doi.org/10.1111/1471-0528.14414>
- Rosario, Margaret, Fei Li, David Wypij, Andrea L. Roberts, Heather L. Corliss, Brittany M. Charlton, A. Lindsay Frazier, and S. Bryn Austin. (2016). “Disparities by Sexual Orientation in Frequent Engagement in Cancer-Related Risk Behaviors: A 12-Year Follow-Up.” *American Journal of Public Health* 106(4). 698–706. <https://doi.org/10.2105/AJPH.2015.302977>
- Rosenwohl-Mack, Amy, Suegee Tamar-Mattis, Arlene B. Baratz, Katharine B. Dalke, Alesdair Ittelson, Kimberly Zieselman, and Jason D. Flatt. (2020). “A National Study on the Physical and Mental Health of Intersex Adults in the U.S.” *PLOS ONE* 15(10). <https://doi.org/10.1371/journal.pone.0240088>.
- Ryan, C., D. Huebner, R. M. Diaz, and J. Sanchez. (2009). “Family Rejection as a Predictor of Negative Health Outcomes in White and Latino Lesbian, Gay, and Bisexual Young Adults.” *Pediatrics*, 123(1). 346–52. <https://doi.org/10.1542/peds.2007-3524>
- Sandfort, Theo G. M., Ron de Graaf, Margreet ten Have, Yusuf Ransome, and Paul Schnabel. (2014). Same-Sex Sexuality and Psychiatric Disorders in the Second Netherlands Mental Health Survey and Incidence Study (NEMESIS-2). *LGBT Health* 1(4):292–301. <https://doi.org/10.1089/lgbt.2014.0031>
- Schuler, Megan S., and Rebecca L. Collins. (2020). “Sexual Minority Substance Use Disparities: Bisexual Women at Elevated Risk Relative to Other Sexual Minority Groups.” *Drug and Alcohol Dependence* 206. 107755. <https://doi.org/10.1016/j.drugalcdep.2019.107755>.
- Semlyen, Joanna, Michael King, Justin Varney, and Gareth Hagger-Johnson. (2016). “Sexual Orientation and Symptoms of Common Mental Disorder or Low Wellbeing: Combined Meta-Analysis of 12 UK Population Health Surveys.” *BMC Psychiatry* 16(1). 67. <https://doi.org/10.1186/s12888-016-0767-z>.
- Siever, Michael D. (1994). “Sexual Orientation and Gender as Factors in Socioculturally Acquired Vulnerability to Body Dissatisfaction and Eating Disorders.” *Journal of Consulting and Clinical Psychology* 62(2). 252–60. <https://doi.org/10.1037/0022-006X.62.2.252>.
- Smiley, Adam, Aisa Burgwal, Carolina Orre, Edward Summanen, García Nieto Isidro, Jelena Vidić, Joz Motmans, Julia Kata, Natia Gvianishvili, Vierge Hård, and Richard Köhler. (2017). *Overdiagnosed*

but Underserved. *Trans Healthcare in Georgia, Poland, Serbia, Spain, and Sweden: Trans Health Survey*. Transgender Europe.

- Tomkins, Andrew, Ryan George, and Merav Kliner. (2019). “Sexualised Drug Taking among Men Who Have Sex with Men: A Systematic Review.” *Perspectives in Public Health* 139(1). 23–33. <https://doi.org/10.1177/1757913918778872>.
- Tracy, J. Kathleen, Nicholas H. Schluterman, and Deborah R. Greenberg. 2013. “Understanding Cervical Cancer Screening among Lesbians: A National Survey.” *BMC Public Health* 13(1). 442. <https://doi.org/10.1186/1471-2458-13-442>.
- Tyutyusheva, Nina, Ilaria, Mancini, Giampiero Igli Baroncelli, Sofia D’Elios, Diego Peroni, Maria Cristina Meriggiola and Silvano Bertelloni. (2021). Complete Androgen Insensitivity Syndrome: From Bench to Bed. *International journal of molecular sciences*, 22(3), 1264. <https://doi.org/10.3390/ijms22031264>
- Walters, Mikel L, Jieru Chen, Matthew J. Breiding. 2013. The National Intimate Partner and Sexual Violence Survey (NISVS): (2010) Findings on Victimization by Sexual Orientation. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- van Drimmelen-Krabbe, Jenny J. (1994). “Homosexuality in the International Classification of Diseases: A Clarification.” *JAMA: The Journal of the American Medical Association* 272 (21). 1660. <https://doi.org/10.1001/jama.1994.03520210044029>.
- Ward, Brian W., Sarah S. Joestl, Adena M. Galinsky, and James M. Dahlhamer. (2015). “Selected Diagnosed Chronic Conditions by Sexual Orientation: A National Study of US Adults, 2013.” *Preventing Chronic Disease* 12. 150-292. <https://doi.org/10.5888/pcd12.150292>.
- Whitbeck, Les B., Xiaojin Chen, Dan R. Hoyt, Kimberly A. Tyler, and Kurt D. Johnson. (2004). “Mental Disorder, Subsistence Strategies, and Victimization among Gay, Lesbian, and Bisexual Homeless and Runaway Adolescents.” *Journal of Sex Research* 41(4). 329–42. <https://doi.org/10.1080/00224490409552240>.
- Witcomb, Gemma L., Walter Pierre Bouman, Nicola Brewin, Christina Richards, Fernando Fernandez-Aranda, and Jon Arcelus. (2015). “Body Image Dissatisfaction and Eating-Related Psychopathology in Trans Individuals: A Matched Control Study: Trans Individuals and Eating Disorder Risk.” *European Eating Disorders Review* 23(4). 287–93. <https://doi.org/10.1002/erv.2362>.
- Wolitski, Richard J. (2005). “The Emergence of Barebacking Among Gay and Bisexual Men in the United States: A Public Health Perspective.” *Journal of Gay & Lesbian Psychotherapy* 9(3–4). 9–34. https://doi.org/10.1300/J236v09n03_02.
- Wu, Lezhou, Randall L. Sell, Alexis M. Roth, and Seth L. Welles. 2018. “Mental Health Disorders Mediate Association of Sexual Minority Identity with Cardiovascular Disease.” *Preventive Medicine* 108. 123–28. <https://doi.org/10.1016/j.ypmed.2018.01.003>.
- Zaritsky, Eve, and Suzanne L. Dibble. (2010). “Risk Factors for Reproductive and Breast Cancers among Older Lesbians.” *Journal of Women’s Health* 19(1). 125–31. <https://doi.org/10.1089/jwh.2008.1094>.
- Zeeman, Laetitia, and Kay Aranda. (2020). “A Systematic Review of the Health and Healthcare Inequalities for People with Intersex Variance.” *International Journal of Environmental Research and Public Health* 17(18). 6533. <https://doi.org/10.3390/ijerph17186533>.

Chapter 3. — Health needs



LGBTI people and their health needs are often invisible in healthcare settings. This neglect frequently originates from a lack of knowledge regarding the specific health needs of the members of this population. In the following chapter, we have collected the most important issues that have direct implications for health service providers.

3.1) Mental health needs

3.1.1) Resilience, self-acceptance, and positive identity

Despite the threats to psychological well-being posed by homophobia and minority stress, many LGBTI people live satisfied and fulfilling lives. This resilience – the ability to cope with minority stress – can be strengthened by accessing social support and developing personal resilience. Sources of social support for sexual and gender minority people can be supportive friends, accepting family, belonging to LGBTI organisations and community groups, and positive relationships at school and work. Personal resilience – which supports positive mental health and protects against the effects of minority stress – can be strengthened by forming good self-esteem and developing coping strategies.

A supportive environment has positive effects on one's self-esteem and identity. As families play a

vital role in children's life and have central and enduring influence on it, it is easy to recognise that an accepting family is critical to the health and wellbeing of young LGBTI persons. Lesbian and gay adolescents with highly supportive family backgrounds have higher self-esteem, greater feelings of security in terms of relationships with family members, and a more positive attitude towards their sexual orientation (Beaty 1999). Young LGB adults with lower levels of family rejection were more than 8 times less likely to report having attempted suicide, and less likely to have mental health or substance abuse problems than those who experienced greater family rejection (Ryan et al. 2009). Apart from family, other LGBTI people also have a role in developing a positive sexuality identity. Social support from other sexual and gender minority individuals whose behaviour counterbalances the negative societal impacts is a protective factor in developing a positive self-identity for young LGBTI people. Role models are similarly important to

the forming of a sense of self. Studies revealed that media role models serve as sources of inspiration and comfort for young sexual and gender minority people and lesbian, gay and bisexual role models in the media positively influence LGB identity (Gomillion and Giuliano 2011).

For sexual and gender minority people an important part of developing a healthy personality is the process of coming out. It is an important step towards developing a positive self-identity and accepting oneself as a sexual or gender minority person. Achieving this positive inner sense of security about one's individual identity is a foundation not only for a healthy self-esteem but also for authentic interpersonal relationships in later life. It is important to reiterate that, while from a provider's perspective it is a single event, for an LGBTI person coming out is a lifelong and dynamic process. Every time they face a new environment or encounter a new person they must deliberate and make a conscious choice about whether they want to share their identity.

In general, outness is associated with better mental health. Being more open about one's sexual orientation may improve mental health by increasing access to social support and decreasing the stress of concealment. Many studies found association between outness and the better mental health outcomes, as lower odds of depression, anxiety and illicit drug use (Baiocco, D'Alessio, and Laghi 2010; Beals, Peplau, and Gable 2009). Disclosure of one's sexual orientation was related to lower rates of suicidal ideation

(Michaels, Parent, and Torrey 2016) and risk behaviour (Rothman et al. 2012). Outness may even affect physiological processes. LGB individuals who disclosed their sexual orientation to parents also have lower concentrations of the stress hormone cortisol and lower levels of allostatic load than LGB individuals who were not out to their families and friends (Juster et al. 2015).

Being open about one's sexual orientation, however, may impact differently the different sexual and gender minority subgroups. A recent study found that outness was associated with decreased illicit drug use in lesbian and gay individuals, however the opposite was reported for bisexual individuals, raising once again questions about the possible greater discrimination bisexuals face.

Healthcare providers are in a position where they can help their patients think through the pros and cons of coming out in different situations, strategies for disclosure, and ways to cope with negative reactions. As a generally reliable rule, the question of coming out should be considered on an individual level. There may be people who would profit less from disclosure, others might not want to or cannot disclose their identity to others for different reasons (they are part of a religious order or work in certain positions or environments). The provider needs to be accepting of this and assist LGBTI clients by supporting their decision in this matter. Helping clients to feel safe and supported will promote their process of self-acceptance and coming out.

3.2) Physical health needs

Certain behaviours affecting general health seem to be more prevalent among sexual and gender minority people. LGBTI people have higher rates of smoking, alcohol consumption and substance dependence compared to their heterosexual and cisgender peers (Blosnich et al. 2010; Gonzales et al. 2016; King et al. 2008a). Some sexual and gender minority subgroups are also more likely to engage in risky sexual behaviours (Feinstein et al. 2019; Herbst et al. 2008). This makes them more at risk of particular health problems and creates a greater need for screening, preventive and harm-reduction interventions for this population.

3.2.1) Prevention: screening and vaccination

As some health problems and risk behaviours are known to be more prevalent in the LGBTI population, it is appropriate to devote particular attention to the prevention of these conditions. Screening for the diseases that disproportionately affect LGBTI people is important as it may contribute to saving lives or improving the life quality of sexual and gender minority people. Vaccination is an effective tool for reducing morbidity and mortality from diseases preventable with vaccines, and vulnerable populations especially benefit from immunisation. Immunisation against Human Papilloma Virus (HPV), Hepatitis A and B infections is recommended for sexual and gender minority people, just as participation in available cancer screening programs.

3.2.2) Screening in primary healthcare settings

During the medical visit, it is possible to use the opportunity and perform simple health check-ups such as measuring blood pressure, calculate BMI and ask the client about smoking or alcohol consumption (additionally performing brief smoking cessation and alcohol use interventions; for more detail see Chapter 4.2.1.b) Screening and intervention in primary healthcare settings). It may also be an opportunity to advise LGBTI individuals to participate in screenings like cancer screening programs or STI testing.

3.2.2.a) Breast and cervical cancer screening for lesbian and bisexual women

Sexual minority women may be at elevated risk of breast and reproductive (ovarian, endometrial, and cervical) cancers. They have higher rates of cancer risk factors such as obesity, smoking, alcohol use and nulliparity (never having given birth) compared to heterosexual women (Cochran et al. 2001). It is important therefore for them to participate in breast screening according to national recommendations. In Hungary every woman between 45-65 years of age must undergo mammography every two years.

The Human Papilloma Virus (HPV) infection, mainly transmitted through sexual contact, is the cause of cervical dysplasia and neoplasia, consequently leading to cervical cancer. It is common to underestimate the HPV risk of lesbian and bisexual women, but they may be at risk of cervical cancer nevertheless. Regular screening is just as important for sexual minority women as for heterosexual women and the smear test (cervical cytology, Pap-test) should be offered

to lesbian and bisexual women aged 25-65 every three years.

3.2.2.b) Colorectal cancer screening

There is no clear evidence on whether the LGBTI population or its subgroups are at greater risk for colorectal cancer, but there are certain risk factors (obesity, smoking, alcohol consumption) present and small-scale studies have found a positive association between sexual minority status and colorectal cancer incidence (Boehmer, Ozonoff, et al. 2011). It is safe to state that participating in colorectal screening programs for sexual and gender minorities is at least as important as for the general public, and as such should be recommended by healthcare professionals.

Several screening tests exist for the early detection of colorectal cancer, including sigmoidoscopy, colonoscopy, double-contrast barium enema, virtual colonoscopy, faecal occult blood test, faecal immunochemical test, and stool DNA test. In Hungary a two-step colorectal cancer screening is recommended for every person between ages of 50 and 70. It consists of an faecal occult blood testing (FOBT) and a colonoscopy in case of a positive test (blood detected in the stool).

3.2.2.c) Prostate cancer screening for gay and bisexual men

Prostate cancer is the most frequently diagnosed cancer in men. There are limited data on the epidemiology of prostate cancer among gay and bisexual men, but all males are at risk for it and in the sexual minority population prostate cancer risk factors, such as smoking, are known to be more prevalent. In Hungary, there is no organised population-level screening for prostate cancer. Both screening methods used – palpation of the prostate by digital rectal exam (DRE) and prostate-specific antigen (PSA)-based screening – have benefits and risks. The decision of screening an asymptomatic patient should be

deliberated individually and they should have an opportunity to discuss the potential benefits and harms of screening with the provider.

3.2.2.d) Cancer screening for transgender individuals

For providers caring for transgender patients, it is important to understand how the transition process (hormonal and/or surgical treatment) affects their cancer risk and screening possibilities. Oestrogen and its metabolites can have carcinogen effects on breast tissue. Trans women undergoing a medical transition with estrogen therapy have external hormonal factors contributing to their increased breast cancer risk when compared to cisgender men. Their risk is lower compared to cisgender women (mainly due to comparatively lower cumulative lifetime estrogen exposure), but it is a risk a provider should be aware of, especially as breast implants may make it more difficult to diagnose a tumour progression.

Trans men who have not undergone bilateral mastectomy (chest reconstruction), or who have only undergone breast reduction, should follow the same guidelines as cisgender women as for breast cancer screening. For those who have undergone bilateral mastectomy and the limited amount of remaining breast tissue makes mammography technically difficult, ultrasound and MRI can be used if a palpable lesion is identified.

The majority of trans men have a cervix present for a substantial portion of their life, and as the HPV burden is disproportionately high in the transgender community, they may be at an increased risk for HPV-associated dysplasia and cancers. It is recommended therefore that trans men have regular screening according to guidelines. The actual screening should be approached sensitively and performed in a respectful way that possibly minimises the experienced trauma (Puechl, Russell, and Gray 2019).

Trans women who have undergone vaginoplasty should undergo routine examinations for the presence of HPV condyloma. In addition, screening for anal cancer should be considered in the HIV-positive trans population (if sexual activity justifies it) as infection with HIV is associated with a higher risk of anal cancer (Grulich et al. 2007).

As to the rarer cancer types, for providers it is important to remember that trans people may be at risk of developing cancer types according to their birth anatomy. The question of advised screening should be broached circumspectly and sensitively as it can cause significant distress to transgender patients.

Trans women who do not undergo removal of the prostate during their surgical transition may be at risk of prostate cancer and the clinician should discuss with the patient the screening options. For transgender men with uterus and ovaries remaining in situ, if they are asymptomatic, there is no need for routine screening for endometrial and ovarian cancer. For symptomatic patients, pelvic ultrasound or CT scan are appropriate initial screening tools (Puechl et al. 2019).

In Hungary, there are no official recommendations yet as to cancer screening in the trans population, but it is important for providers taking care of transgender individuals to be aware of their cancer risks and recommend screening accordingly.

3.2.2.e) STI screening

Screening for sexually transmitted infections (STIs) is also an important opportunity for improving the health of the sexual and gender minority population. The guideline that provides recommendations about screening for STIs and HIV in sexually active asymptomatic sexual and gender minority people is presented in detail in the ‘Sexual health’ chapter.

3.2.3) Vaccination

In general, LGBTI youth should receive age-appropriate vaccinations according to national guidelines. As MSM and trans women are at an increased risk of contracting Hepatitis A and B infections, uninfected individuals who have no record of being vaccinated should be offered a 3-series course of Hepatitis A+B vaccinations. Most of the European childhood immunisation schedules have included Hepatitis B vaccination since the 1990s so the majority of young adults have been immunised. Nevertheless, even for those individuals who have been vaccinated against HBV in infancy or childhood, it is worth considering offering the combined Hepatitis A+B vaccine over the single Hepatitis A vaccine as a booster against HBV.

Human Papillomavirus (HPV) infection is a causal factor in the development of cervical, anal, penile, vulvar, vaginal and oropharyngeal cancers, as well as genital warts and recurrent respiratory papillomatosis (Arbyn et al. 2012). Sexually active people – heterosexuals and sexual and gender minority people alike – are at risk of contracting HPV infection and should be vaccinated against.

The HPV vaccine is recommended for routine immunisation at age 11 or 12 years, but it can be started at age 9 and is recommended through age 26 years for those not adequately vaccinated previously (Meites, Kempe, and Markowitz 2016).

In Hungary, immunisation against HPV is offered only to girls aged 12, although adolescent boys should be vaccinated too, for the prevention of HPV-associated genital and anal warts as well as anal cancer. The HPV vaccine was introduced in most European countries in the 2000s, therefore most of the people born before 1990 are unlikely to have been immunised. Vaccination is routinely recommended before age 26, but clinicians can consider offering HPV vaccination for adults aged 27 to 45 years (Meites et al. 2016).

3.3) Sexual health

Sexual health consists not merely of counselling and care related to reproduction and sexually transmitted diseases. According to WHO definition, sexual health is a state of physical, mental and social well-being in relation to sexuality. It requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. The goals of the promotion of sexual health of LGBTI people are the same as for the general population. The health professional's role is to help their patients achieve a state of sexual health by providing them with knowledge and possibilities to prevent disease and harm and to have positive experiences.

It is important that providers should learn to discuss the topic of sexual health, to ask non-judgmental questions about sexual behaviour, identity and activity; and be prepared to address the related concerns of their patients. Obtaining a sexual history from patients helps ascertain risky behaviours and find opportunities for prevention and diagnosis.

When discussing sexual health questions, the focus is more on the person's actual behaviour than identity, therefore – while acknowledging the diversity of LGBTI identities – the usage of terms 'men who have sex with men' (MSM) and 'women who have sex with women' (WSW) is more accurate in this chapter.

Within the broad topic of sexual health, health professionals are usually most concerned about unsafe sex as a risk factor for STD morbidity and mortality. Certain health problems are associated with sexual risk behaviours, such as STI and HIV infections, and there are specific factors which make some members of LGBTI population more vulnerable.

Sexual and gender minority subgroups are char-

acterised by different rates of sexual risk-taking behaviour. Among men who have sex with men, high rates of risky sexual behaviours are documented, though differences can be found even within this population. Bisexual men reported more insertive condomless anal sex with casual partners, they were more likely to report marijuana use before sex, and they were less likely to report lifetime HIV testing and PrEP (pre-exposure prophylaxis) use compared to gay men in a recent study (Feinstein et al. 2019). Among trans people, trans women are more likely to engage in risky sexual behaviours (e.g., unprotected receptive anal intercourse, multiple casual partners, sex work) while similar risk behaviours were low among trans men (Herbst et al. 2008).

The populations most at risk of HIV and STIs therefore are men who have sex with men (MSM) and trans women. The main transmission mode for HIV infection in this population is unprotected anal intercourse, and, less frequently, intravenous drug use. There is a common, though unfounded assumption among healthcare providers that lesbian women, or WSW, are not at risk of STI transmission. They might be having or have had sex with men, or engage in sexual risk behaviours and have multiple sexual partners (Ybarra et al. 2016). Also, woman to woman transmission of STI pathogens have been documented (Bauer and Welles 2001). This underestimation of the true STI risk for sexual minority women may result in missing screening and prevention opportunities.

It is important also to address pregnancy risks and the need of contraception among WSW, trans men and non-binary persons. Women who have sex with men and women (WSMW) might be at increased risk for unplanned pregnancy, especially during adolescence (Charlton et al. 2013). Similarly, trans men may be in need of contraceptive and conception counselling (Light et al. 2018).

3.3.1) Prevention of HIV infection and STIs

3.3.1.a) Screening

The guideline for Prevention of Sexually Transmitted Diseases published by the US Centers for Disease Control and Prevention (CDC) provides recommendations about screening for STIs and HIV for sexual and gender minorities. As the risk is related to sexual behaviour, the screening recommendations are for sexually active asymptomatic people. Although the US belongs to those countries where HIV prevalence is high, the general aspects of the screening recommendation can be applied in Hungary too.

STI screening for MSM is recommended annually. If the individual is at increased risk (engages in chem-sex or has sex with multiple or anonymous partners) testing is recommended every 3-6 months. The testing should include HIV- and syphilis serology and screening for *Neisseria gonorrhoeae* and *Chlamydia trachomatis* in urethral, and if needed, anal and pharyngeal sites (Workowski and Bolan 2015).

Hepatitis viruses are also of significance. The Hepatitis A virus, transmitted through faecal-oral route, is known to cause outbreaks among MSM (ECDC 2019). The Hepatitis B and C viruses are bloodborne pathogens that may be transmitted sexually, and there is increasing evidence that some MSM, particularly those who are HIV infected, are at high risk of HCV infection (Hagan et al. 2015). As HCV infection is more likely to become chronic in presence of HIV, screening for HCV by testing for Hepatitis C antibodies is recommended at least annually for at-risk HIV-positive MSM. Screening for Hepatitis B by testing for HBsAg is also recommended for sexually active MSM, and immunisation against Hepatitis A and B viruses should be offered to uninfected individuals without documented vaccination.

The elevated risk of transgender people, especially transgender women (as well as non-binary persons), is related to risk-taking behaviour, therefore the screening recommendations are based not on identity but on the sexual activity of the patients. Sexually active transgender individuals – especially those who have sex with men – with high-risk behaviour (unprotected intercourse, sharing needles for injection of hormones or other drugs) should be screened similarly to MSM men.

Contrary to the common conception, WSW can contract bacterial, viral, and protozoal sexually transmitted infections both from male and female sex partners (Gorgos and Marrazzo 2011). It is important to be aware that some WSW have or have had sex with men, and that certain practices make possible the transmission of STI pathogens through the exchange of vaginal fluids. WSW who are sexually active should be offered Hepatitis A+B vaccinations, and have Pap smears regularly, according to national guidelines.

3.3.1.b) Relative risk of sexual practices

Occasionally patients may be unaware of the specific HIV and STI risks associated with some sexual behaviours. They may not know that they can contract STI from an infected partner during certain activities, like unprotected oral sex, digital manipulation or sharing sex toys. There are available comprehensive charts relating to the risk of contracting an STI from an infected partner during particular sexual activities. For MSM, the highest risk activity is receptive anal intercourse.

Activities involving the exchange of bodily fluids allow the transmission of HIV and blood-borne hepatitis viruses as well as other STI pathogens, while contact with faecal matter puts individuals at risk of hepatitis A and enteric infections. Close skin-to-skin contact is enough for transmission of syphilis, HPV and HSV.

3.3.1.c) Preventive measures

Condoms or other latex barriers (dental dams) are the fundamental and most efficient tools for the prevention of exchange of bodily fluids. Most patients are aware of this, still the provider should repeat the importance of the consistent and correct use of condoms and dental dams. Sex toys should not be shared between partners or they should be cleaned with bleach (or at least with soap and water) and used with condoms.

When risky sexual practices are identified, the clinician should encourage patients to change or drop them, but in a considerate way. There are differences in individuals' risk taking and some are willing to accept more risk than others. In some cases, harm reduction is the best approach for the clinician and counselling should focus on optimising the risk someone takes or is willing to put their partner at. Individuals should be advised to think and plan in advance and contemplate the risk they are willing to accept before the encounter. As alcohol and drug use affects rational decision making, reducing substance use can contribute to minimising sexual risk behaviours.

3.3.1.d) Bioprophylaxis

Pre – and post-exposure prophylaxes are interventions that use antiretroviral therapy (ART) to reduce the risk of acquisition of HIV.

Post-exposure prophylaxis (PEP) is a short-term antiretroviral treatment to reduce the likelihood of HIV infection after potential exposure. A four-week regimen of PEP should be offered and initiated as early as possible (ideally within 72 hours) to all seronegative individuals after any activity that has the potential for HIV transmission (Young et al. 2007).

Pre-exposure prophylaxis (PrEP) is a prevention strategy for people who are at very high risk of

getting HIV infection. It consists of a daily course of antiretroviral drugs taken by HIV-negative people. When taken as prescribed, PrEP is highly effective for preventing HIV transmission (Chou et al. 2019). It is important, however, to inform the patients that PrEP does not protect against other STIs, so they need to use other forms of prevention.

3.3.2) Reproductive issues

The fertility plans of LGBTI patients are often neglected, as many providers think these are not relevant questions for sexual and gender minority people. It is important to ask sexual and gender minority people about their intentions of becoming parents in order to help them with family planning and encourage patients to consider a reproductive life plan.

There is a significant and growing portion of the LGBTI population planning to become parents. In a recent US study, 78% of lesbian and 47% of gay participants had parenting desires (Riskind and Tornello 2017).

Forming planned LGB-parent families – families of LGB people who decide to become parents after coming out – may have significant barriers for same-sex couples. While different pathways exist for LGBTI people to become parents, the availability of these may vary in different countries.

Assisted reproduction, foster care or adoption are the options from which same-sex couples may choose, though often they encounter legal, financial and medical barriers. Adoptive agencies and reproductive health clinics may refuse to provide services on the basis of the client's sexual orientation or marital status and national legislation and policies may prohibit same-sex couples to use these services.

Women may consider in vitro fertilisation (IVF), or donor sperm insemination and many lesbian and bisexual women choose this option. They may use sperm from a known (male friend or family member) or unknown (sperm bank) donor and the woman who conceives will be genetically linked to her child. The 'partner assisted reproduction' (also known as shared motherhood) uses the fertilised eggs of one woman and transfers the embryo into the other's uterus, this way making both mothers physically or biologically linked to the child. This process, however, is the most demanding, as both mothers have to go through the course of fertility treatment before the transfer.

For gay and bisexual men, surrogacy is an option. In this case, a surrogate mother, who is artificially inseminated or has an embryo transferred to her uterus, carries the child. The father whose sperm is used will be genetically linked with the child.

Trans people face specific challenges when they want to become parents, as sex hormone therapies and gender affirmation therapies reduce or remove fertility. There are however options for trans people, who want to become biological parents, such as donor insemination, surrogacy or fertility preservation (cryopreservation of eggs or sperm).

Other ways to become parents for LGBTI people

is through foster care or adoption. In this case there will be no genetic link between the parents and the child, but some may prefer it as a possibility to give an abandoned child a home or if they object to surrogacy on ethical grounds.

In Hungary, women up to the age of 45 years can access assisted reproduction and lesbians can have access to assisted reproduction only if they declare they are single. Bisexual and lesbian women living in registered partnership are excluded. Surrogacy is prohibited in Hungary, and same-sex couples cannot adopt jointly.

The transition to parenthood is a major life event and even when desired, it can be stressful, for sexual and gender minority people the same way as for heterosexual parents. Expectant LGB parents, however, may receive less support from their friends or relatives (Goldberg 2006), and sexual minority women may be at higher risk for postpartum depression (PPD) (Ross et al. 2007).

Becoming aware of the issues in forming planned LGB-parent families helps clinicians in their effort to provide quality healthcare. Healthcare providers should be familiar with the available options for LGBTI people who seek to become parents through adoption or assisted reproduction. Healthcare providers who are informed of the possibilities for LGBTI people are better prepared to help prospective and current LGBTI parents in caring for themselves and their families.

3.4) Health risks (addiction help, social support)

In order to obtain a clear picture of the health issues related to this topic, it is important to understand the social context and the role of alcohol and substance use in the LGBTI community. There are still plenty of stereotypes and stigma attached to substance use and many LGBTI persons have experienced discriminatory attitudes in healthcare settings because of their alcohol or substance use.

High levels of alcohol consumption, smoking and substance use among lesbian, gay and bisexual people have been identified in international research. A number of studies (Cunningham et al. 2018; Gonzales et al. 2016) have found that LGBTI people are at significantly higher risk for heavy drinking and alcohol dependence than their heterosexual cisgender peers. They are also at elevated risk of smoking and substance dependence (Blosnich et al. 2010; Hughto et al. 2021).

The disparity in smoking, substance use and alcohol abuse is greatly associated with exposure to victimisation – such as physical and sexual abuse, homelessness and intimate partner violence among sexual and gender minorities (Drabble et al. 2013; McLaughlin et al. 2012).

Other risk factors for substance use are the lack of supportive environment, psychological stress, internalising / externalising problem behaviour, negative reactions to disclosure, and housing status (Goldbach et al. 2014). Low levels of perceived support from parents or from other adults at school were related to higher rates of substance use (McDonald 2018; Seil, Desai, and Smith 2014). Disclosure of sexual identity to unsupportive parents was associated with higher illicit drug use (Rothman et al. 2012). Homelessness and housing instability for LGB youth is often connected to their sexual-minority status (forced to leave their home or running away because of parental homophobia) and is a strong risk factor for youth substance use (Goldbach et al. 2014).

While social interactions can be a source of stress, they can also offer strength and support to LGBTI people. A supportive environment can function as a protective factor against substance dependence and other mental health problems. Perceived social support is linked to better mental health status; individuals with more support are less likely to be depressed and less likely to attempt suicide. Greater social support is also associated with less substance use (Seil et al. 2014). Other studies also confirm this connection. LGB adults who disclosed their sexual orientation to parents and whose parents showed supportive reactions to disclosure are associated with lower levels of health risk behaviours and conditions (Rothman et al. 2012).

When examining the effects of social support on mental health among sexual and gender minority youth, higher levels of social support were associated with positive self-esteem. Social support is fundamental to the development of a sense of self and particularly important to LGBTI adolescents, who typically face higher amounts of stress and violence throughout their youth. LGBTI people are usually at greater risk of being alienated from their families and experiencing harassment at school. Sexual and gender minority adolescents who experience social support have more positive outcomes in the reduction of mental health disorders, such as symptoms of depression, suicidal ideation, drug use, sexual orientation violence, and anxiety (McDonald 2018).

Besides supportive family and peers, LGBTI community support is an important source of strength for sexual and gender minority people of all ages. Affiliation with LGBTI organisations can be a significant source of support and coping for sexual and gender minority people and can reduce the impact of minority stressors (Meyer 2003).

3.5) Syndemic theory

Research suggests the existence of co-occurring epidemics, or “syndemic”, of health problems among sexual and gender minorities (Coulter et al. 2015; Parsons, Grov, and Golub 2012).

The syndemic theory offers an alternative to an individual approach, which targets problems separately, focusing on changing individual behaviour and/or treating individual illness.

According to syndemic theory, in minority populations the accumulation of risk factors intertwine with complex social problems leading to disproportionate burdens of disease (Mustanski et al. 2007). The co-occurring psychosocial problems interact and mutually reinforce one another. This way, in a sexual and gender minority population substance use is connected to HIV

and other STIs, depression, self-stigma, violence, childhood abuse and is exacerbated by minority stress that originates from societal homophobia. The cumulative effect increases negative health consequences. This approach underlines the existence of multiple health disparities among gay and lesbian individuals, and places prevention in a broader contextual framework.

For providers, this theory implies that focusing on one component of the syndemic – like substance use – is likely to be insufficient. A sexual minority person after a specific intervention may become abstinent, yet continue to face health disparities because of other syndemic factors, such as depression, internalised homophobia, childhood abuse or discrimination.

References

- Albert Kennedy Trust. (2015). *LGBT Youth Homelessness: A UK National Scoping of Cause, Prevalence, Response, and Outcome*. UK Albert Kenny Trust.
- APA. (2009). *Report of the American Psychological Association Task Force on Appropriate Therapeutic Responses to Sexual Orientation*. APA Task Force on Appropriate Therapeutic Responses to Sexual Orientation.
- Amnesty International. (2017). ‘First, Do No Harm: Ensuring the Rights of Children with Variations of Sex Characteristics in Denmark and Germany Report’. <https://www.amnesty.org/download/Documents/EUR0160862017ENGLISH.PDF>
- Austin, S. Bryn, Mathew J. Pazaris, Lauren P. Nichols, Deborah B., Esther K. Wei, Donna, S. (2013). “An Examination of Sexual Orientation Group Patterns in Mammographic and Colorectal Screening in a Cohort of U.S. Women.” *Cancer Causes & Control* 24(3). 539–47. <https://doi.org/10.1007/s10552-012-9991-0>.
- Kesha, B.R., Oranuba, E., Werts, N., Edwards, L. V. (2017). “Addressing healthcare Disparities Among Sexual Minorities.” *Obstetrics and Gynecology Clinics of North America* 44(1). 71–80. <https://doi.org/10.1016/j.ogc.2016.11.003>.
- Bauer, Greta R., Seth L. Welles. (2001). “Beyond Assumptions of Negligible Risk: Sexually Transmitted Diseases and Women Who Have Sex With Women.” *American Journal of Public Health*. 91(8). 1282–86. <https://doi.org/10.2105/AJPH.91.8.1282>.
- Bauer M., Truffer D. (2019). Intersex Genital Mutilations Human Rights Violations Of Children With Variations Of Reproductive Anatomy. <https://intersex.shadowreport.org/public/2019-CRC-Malta-NGO-Zwischengeschlecht-Intersex-IGM.pdf>
- Beach, Lauren B., Tom A. Elasy, and Gilbert Gonzales. (2018). “Prevalence of Self-Reported Diabetes by Sexual Orientation: Results from the 2014 Behavioral Risk Factor Surveillance System.” *LGBT Health* 5(2).121–30. <https://doi.org/10.1089/lgbt.2017.0091>.
- Beren, Susan E., Helen A. Hayden, Denise E. Wilfley, Carlos M. Grilo. (1996). “The Influence of Sexual Orientation on Body Dissatisfaction in Adult Men and Women.” *The International Journal of Eating Disorders* 20(2). 135–41..
- Berg, Rigmor C. (2009). “Barebacking: A Review of the Literature.” *Archives of Sexual Behavior* 38(5). 754–64. <https://doi.org/10.1007/s10508-008-9462-6>.
- Blossnich, John, Jarrett, Traci, Horn, Kimberly. (2010). “Disparities in Smoking and Acute Respiratory Illnesses Among Sexual Minority Young Adults.” *Lung* 188(5). 401–7. <https://doi.org/10.1007/s00408-010-9244-5>.
- Boehmer, Ulrike, Al Ozonoff, and Xiaopeng Miao. (2011). “An Ecological Analysis of Colorectal Cancer Incidence and Mortality: Differences by Sexual Orientation.” *BMC Cancer* 11(1). 400. <https://doi.org/10.1186/1471-2407-11-400>.
- Boehmer, Ulrike, Xiaopeng Miao, and Al Ozonoff. (2011). “Cancer Survivorship and Sexual Orientation.” *Cancer* 117(16). 3796–3804. <https://doi.org/10.1002/cncr.25950>.
- Boehmer, Ulrike, Xiaopeng Miao, Crystal Linkletter, and Melissa A. Clark. (2014). “Health Conditions in Younger, Middle, and Older Ages: Are There Differences by Sexual Orientation?” *LGBT Health* 1(3). 168–76. <https://doi.org/10.1089/lgbt.2013.0033>.
- Brandenburg, Dana L., Alicia K. Matthews, Timothy P. Johnson, and Tonda L. Hughes. (2007). “Breast Cancer Risk and Screening: A Comparison of Lesbian and Heterosexual Women.” *Women & Health* 45(4). 109–30. https://doi.org/10.1300/J013v45n04_06.
- Caceres, Billy A., Abraham A. Brody, Perry N. Halkitis, Caroline Dorsen, Gary Yu, and Deborah A.

- Chyun. (2018). “Sexual Orientation Differences in Modifiable Risk Factors for Cardiovascular Disease and Cardiovascular Disease Diagnoses in Men.” *LGBT Health* 5(5). 284–94. <https://doi.org/10.1089/lgbt.2017.0220>.
- Calzo, Jerel P., Aaron J. Blashill, Tiffany A. Brown, and Russell L. Argenal. (2017). “Eating Disorders and Disordered Weight and Shape Control Behaviors in Sexual Minority Populations.” *Current Psychiatry Reports* 19(8). 49. <https://doi.org/10.1007/s11920-017-0801-y>.
- Calzo, Jerel P., Andrea L. Roberts, Heather L. Corliss, Emily A. Blood, Emily Kroshus, and S. Bryn Austin. (2014). “Physical Activity Disparities in Heterosexual and Sexual Minority Youth Ages 12–22 Years Old: Roles of Childhood Gender Nonconformity and Athletic Self-Esteem.” *Annals of Behavioral Medicine* 47(1). 17–27. <https://doi.org/10.1007/s12160-013-9570-y>.
- Carballo-Diéguez, A., A. Ventuneac, J. Bauermeister, G. W. Dowsett, C. Dolezal, R. H. Remien, I. Balan, and M. Rowe. (2009). “Is ‘Bareback’ a Useful Construct in Primary HIV-prevention? Definitions, Identity and Research.” *Culture, Health & Sexuality* 11(1). 51–65. <https://doi.org/10.1080/13691050802419467>.
- Charkhchi, Paniz, Matthew B. Schabath, and Ruth C. Carlos. (2019). “Modifiers of Cancer Screening Prevention Among Sexual and Gender Minorities in the Behavioral Risk Factor Surveillance System.” *Journal of the American College of Radiology* 16(4). 607–20.
- Chew, Denise, Jemma Anderson, Katrina Williams, Tamara May, and Kenneth Pang. 2018. “Hormonal Treatment in Young People With Gender Dysphoria: A Systematic Review.” *Pediatrics* 141(4). <https://doi.org/10.1542/peds.2017-3742>.
- Creighton, Sara. (2001). Surgery for Intersex. *Journal of the Royal Society of Medicine*, 94(5), 218–220. <https://doi.org/10.1177/014107680109400505>
- Cochran, Bryan N., Angela J. Stewart, Joshua A. Ginzler, and Ana Mari Cauce. (2002). “Challenges Faced by Homeless Sexual Minorities: Comparison of Gay, Lesbian, Bisexual, and Transgender Homeless Adolescents With Their Heterosexual Counterparts.” *American Journal of Public Health* 92(5). 773–77. <https://doi.org/10.2105/AJPH.92.5.773>.
- Cochran, Susan D., Jack Drescher, Eszter Kismödi, Alain Giami, Claudia García-Moreno, Elham Atalla, Adele Marais, Elisabeth Meloni Vieira, and Geoffrey M. Reed. (2020). “Proposed Declassification of Disease Categories Related to Sexual Orientation in the International Statistical Classification of Diseases and Related Health Problems (ICD-11).” *FOCUS* 18(3). 351–57. <https://doi.org/10.1176/appi.focus.18303>.
- Cochran, Susan D., Vickie M. Mays, Deborah J. Bowen, Susan Gage, Deborah Bybee, Susan J. Roberts, Robert S. Goldstein, Ann Robison, Elizabeth J. Rankow, and Jocelyn White. (2001). “Cancer-Related Risk Indicators and Preventive Screening Behaviors among Lesbians and Bisexual Women.” *American Journal of Public Health* 91(4). 591–97. <https://doi.org/10.2105/AJPH.91.4.591>.
- Conron, Kerith J., Matthew J. Mimiaga, and Stewart J. Landers. (2010). “A Population-Based Study of Sexual Orientation Identity and Gender Differences in Adult Health.” *American Journal of Public Health* 100(10). 1953–60. <https://doi.org/10.2105/AJPH.2009.174169>.
- Cunningham, Timothy J., Fang Xu, and Machell Town. (2018). “Prevalence of Five Health-Related Behaviors for Chronic Disease Prevention Among Sexual and Gender Minority Adults — 25 U.S. States and Guam, 2016.” *Morbidity and Mortality Weekly Report* 67(32). 888–93. <https://doi.org/10.15585/mmwr.mm6732a4>.
- Curmi, Claire, Kath Peters, and Yenna Salamonson. (2014). “Lesbians’ Attitudes and Practices of Cervical Cancer Screening: A Qualitative Study.” *BMC Women’s Health* 14(1). 2. <https://doi.org/10.1186/s12905-014-0153-2>.
- Davy, Zowie, and Michael Toze. (2018). “What Is Gender Dysphoria? A Critical Systematic Narrative Review.” *Transgender Health* 3(1). 159–69.

- Devries, Karen M., Joelle Y. Mak, Loraine J. Bacchus, Jennifer C. Child, Gail Falder, Max Petzold, Jill Astbury, and Charlotte H. Watts. (2013). "Intimate Partner Violence and Incident Depressive Symptoms and Suicide Attempts: A Systematic Review of Longitudinal Studies." *PLoS Medicine* 10(5). <https://doi.org/10.1371/journal.pmed.1001439>.
- Dicken, Bryan J., Deborah F. Billmire, Mark, Krailo, Caihong Xia, Furqan Shaikh, John W. Cullen, Thomas A. Olson, Farzana Pashankar, Marcio H. Malogolowkin, James F. Amatruda, Frederick, Rescorla, Rachel A. Egler, Jonathan H. Ross, Carlos Rodriguez-Galindo and Lindsay Frazier. (2018). "Gonadal dysgenesis is associated with worse outcomes in patients with ovarian nondysgerminomatous tumors: A report of the Children's Oncology Group". *Pediatric blood & cancer*, 65(4)
- Diemer, Elizabeth W., Julia D. Grant, Melissa A. Munn-Chernoff, David A. Patterson, and Alexis E. Duncan. (2015). "Gender Identity, Sexual Orientation, and Eating-Related Pathology in a National Sample of College Students." *Journal of Adolescent Health* 57(2). 144–49. <https://doi.org/10.1016/j.jadohealth.2015.03.003>.
- Dilley, Julia A., Katrina Wynkoop Simmons, Michael J. Boysun, Barbara A. Pizacani, and Mike J. Stark. (2010). "Demonstrating the Importance and Feasibility of Including Sexual Orientation in Public Health Surveys: Health Disparities in the Pacific Northwest." *American Journal of Public Health* 100(3). 460–67. <https://doi.org/10.2105/AJPH.2007.130336>.
- Drabble, Laurie, Karen F. Trocki, Tonda L. Hughes, Rachael A. Korcha, and Anne E. Lown. (2013). "Sexual Orientation Differences in the Relationship between Victimization and Hazardous Drinking among Women in the National Alcohol Survey." *Psychology of Addictive Behaviors* 27(3). 639–48. <https://doi.org/10.1037/a0031486>.
- Dragon, Christina N., Paul Guerino, Erin Ewald, and Alison M. Laffan. (2017). "Transgender Medicare Beneficiaries and Chronic Conditions: Exploring Fee-for-Service Claims Data." *LGBT Health* 4(6). 404–11. <https://doi.org/10.1089/lgbt.2016.0208>.
- Drescher, Jack. (2015). "Out of DSM: Depathologizing Homosexuality." *Behavioral Sciences* 5(4). 565–75. <https://doi.org/10.3390/bs5040565>.
- Durso, Laura E., and Gary J. Gates. (2012). *Serving Our Youth: Findings from a National Survey of Service Providers Working with Lesbian, Gay, Bisexual, and Transgender Youth Who Are Homeless or At Risk of Becoming Homeless*. Los Angeles: The Williams Institute with True Colors Fund and The Palette Fund.
- Dyar, Christina, Tenille C. Taggart, Craig Rodriguez-Seijas, Ronald G. Thompson, Jennifer C. Elliott, Deborah S. Hasin, and Nicholas R. Eaton. (2019). "Physical Health Disparities Across Dimensions of Sexual Orientation, Race/Ethnicity, and Sex: Evidence for Increased Risk Among Bisexual Adults." *Archives of Sexual Behavior* 48(1). 225–42. <https://doi.org/10.1007/s10508-018-1169-8>.
- ECDC/WHO Europe. (2014). *HIV/AIDS Surveillance in Europe 2013*. Stockholm: European Centre for Disease Prevention and Control.
- Eliason, Michele J., Natalie Ingraham, Sarah C. Fogel, Jane A. McElroy, Jennifer Lorvick, D. Richard Mauery, and Suzanne Haynes. (2015). "A Systematic Review of the Literature on Weight in Sexual Minority Women." *Women's Health Issues* 25(2). 162–75. <https://doi.org/10.1016/j.whi.2014.12.001>.
- Emory, Kristen, Yoonsang Kim, Francisco Buchting, Lisa Vera, Jidong Huang, and Sherry L. Emery. (2016). "Intragroup Variance in Lesbian, Gay, and Bisexual Tobacco Use Behaviors: Evidence That Subgroups Matter, Notably Bisexual Women." *Nicotine & Tobacco Research* 18(6). 1494–1501. <https://doi.org/10.1093/ntr/ntv208>.
- European Union. (2021). *European Parliament, European Parliament Resolution on Declaration of the EU as an LGBTIQ Freedom Zone*. https://www.europarl.europa.eu/doceo/document/TA-9-2021-0089_EN.pdf
- Everett, Bethany, and Stefanie Mollborn. (2013). "Differences in Hypertension by Sexual Orientation

- Among U.S. Young Adults." *Journal of Community Health* 38(3). 588–96. <https://doi.org/10.1007/s10900-013-9655-3>.
- Falhammar, Henrik, Hedi Claahsen-van der Grinten, Nicole Reisch, Jolanta Slowikowska-Hilczler, Anna Nordenström, Robert Roehle, Claire Bouvattier, Baudewijntje P. C. Kreukels, and Birgit Köhler., and dsd-LIFE group. (2018). "Health status in 1040 adults with disorders of sex development (DSD): a European multicenter study" *Endocrine connections* 7(3). 466–78. <https://doi.org/10.1530/EC-18-0031>
- Fallat, Mary E., and Patricia K. Donahoe. (2006). "Intersex genetic anomalies with malignant potential". *Current opinion in pediatrics* 18(3) 305–311. <https://doi.org/10.1097/01.mop.0000193316.60580.d7>
- Farmer, Grant W., Jennifer M. Jabson, Kathleen K. Bucholz, and Deborah J. Bowen. (2013). "A Population-Based Study of Cardiovascular Disease Risk in Sexual-Minority Women." *American Journal of Public Health* 103(10). 1845–50. <https://doi.org/10.2105/AJPH.2013.301258>.
- Febo-Vazquez, Isaedmarie, Casey E. Copen, and Jill Daugherty. (2018). "Main Reasons for Never Testing for HIV Among Women and Men Aged 15-44 in the United States, 2011-2015." *National Health Statistics Reports* (107). 1–12.
- Fredriksen-Goldsen, Karen I., Hyun-Jun Kim, Susan E. Barkan, Anna Muraco, and Charles P. Hoy-Ellis. (2013). "Health Disparities Among Lesbian, Gay, and Bisexual Older Adults: Results From a Population-Based Study." *American Journal of Public Health* 103(10). 1802–9. <https://doi.org/10.2105/AJPH.2012.301110>.
- Galinsky, Adena M., Brian W. Ward, Sarah S. Joestl, and James M. Dahlhamer. (2018). "Sleep Duration, Sleep Quality, and Sexual Orientation: Findings from the 2013-2015 National Health Interview Survey." *Sleep Health* 4(1). 56–62. <https://doi.org/10.1016/j.sleh.2017.10.004>.
- Gangamma, Rashmi, Natasha Slesnick, Paula Toviesi, and Julianne Serovich. (2008). "Comparison of HIV Risks among Gay, Lesbian, Bisexual and Heterosexual Homeless Youth." *Journal of Youth and Adolescence* 37(4). 456–64. <https://doi.org/10.1007/s10964-007-9171-9>.
- Gonzales, Gilbert, and Carrie Henning-Smith. (2017). "Health Disparities by Sexual Orientation: Results and Implications from the Behavioral Risk Factor Surveillance System." *Journal of Community Health* 42(6). 1163–72. <https://doi.org/10.1007/s10900-017-0366-z>.
- Gonzales, Gilbert, Julia Przedworski, and Carrie Henning-Smith. (2016). "Comparison of Health and Health Risk Factors Between Lesbian, Gay, and Bisexual Adults and Heterosexual Adults in the United States: Results From the National Health Interview Survey." *JAMA Internal Medicine* 176(9). 1344. <https://doi.org/10.1001/jamainternmed.2016.3432>.
- Grant, Jaime M., Lisa A. Mottet, Justin Tanis, Jack Harrison, Jody L. Herman, and Mara Keisling. (2011). *Injustice at Every Turn: A Report of the National Transgender Discrimination Survey*. Washington: National Center for Transgender Equality and National Gay and Lesbian Task Force.
- GrApSIA and Audi Laura. (2014). *Past Experiences of Adults with Disorders of Sex Development*. In *Endocrine Development* (pp. 138-48). S. KARGER AG. <https://doi.org/10.1159/000363639>
- Grossman, Arnold H., and Anthony R. D'Augelli. (2007). "Transgender Youth and Life-Threatening Behaviors." *Suicide and Life-Threatening Behavior* 37(5). 527–37. <https://doi.org/10.1521/suli.2007.37.5.527>.
- Haldeman, Douglas C. (2002). "Therapeutic Antidotes: Helping Gay and Bisexual Men Recover from Conversion Therapies." *Journal of Gay & Lesbian Psychotherapy* 5(3–4). 117–30. https://doi.org/10.1300/J236v05n03_08.
- Heck, Julia E., and Judith S. Jacobson. (2006). "Asthma Diagnosis Among Individuals in Same-Sex Relationships." *Journal of Asthma* 43(8). 579–84. <https://doi.org/10.1080/02770900600878289>.
- Houston, Eric, and David J. McKirnan. (2007). "Intimate Partner Abuse among Gay and Bisexual Men: Risk Correlates and Health Outcomes." *Journal of Urban Health* 84(5). 681–90. <https://doi.org/10.1007/s11524-007-9188-0>.

■ Hoyos, Juan, Kostas Koutentakis, Tomás Maté, Jose Pulido, Luis Sordo, Juan-Miguel Guerras, and María-José Belza. (2020). “High Risk Men Who Have Sex with Men in Spain Are Reporting Low Intentions of Actively Seeking HIV Testing: Results from a Cross-Sectional Study.” *BMC Public Health* 20(1).398. <https://doi.org/10.1186/s12889-020-8440-3>.

■ Hughes, Tonda L., Cindy B. Veldhuis, Laurie A. Drabble, and Sharon C. Wilsnack. (2020). “Research on Alcohol and Other Drug (AOD) Use among Sexual Minority Women: A Global Scoping Review” *PLOS ONE* 15(3). <https://doi.org/10.1371/journal.pone.0229869>.

■ Hughto, Jaclyn M. W., Emily K. Quinn, Michael S. Dunbar, Adam J. Rose, Theresa I. Shireman, and Guneet K. Jasuja. (2021). “Prevalence and Co-Occurrence of Alcohol, Nicotine, and Other Substance Use Disorder Diagnoses Among US Transgender and Cisgender Adults.” *JAMA Network Open* 4(2). <https://doi.org/10.1001/jamanetworkopen.2020.36512>.

■ Institute of Medicine (U.S.), (2011). *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*. Washington, DC: National Academies Press.

■ Jamal, Ahmed, Elyse Phillips, Andrea S. Gentzke, David M. Homa, Stephen D. Babb, Brian A. King, and Linda J. Neff. (2018). “Current Cigarette Smoking Among Adults — United States, 2016.” *Morbidity and Mortality Weekly Report* 67(2). 53–59. <https://doi.org/10.15585/mmwr.mm6702a1>.

■ Juster, Robert-Paul, Mark L. Hatzenbuehler, Adrianna Mendrek, James G. Pfaus, Nathan Grant Smith, Philip Jai Johnson, Jean-Philippe Lefebvre-Louis, Catherine Raymond, Marie-France Marin, Shireen Sindi, Sonia J. Lupien, and Jens C. Pruessner. (2015). “Sexual Orientation Modulates Endocrine Stress Reactivity.” *Biological Psychiatry* 77(7). 668–76. <https://doi.org/10.1016/j.biopsych.2014.08.013>.

■ Kerker, Bonnie D., Farzad Mostashari, and Lorna Thorpe. (2006). “Healthcare Access and Utilization among Women Who Have Sex with Women: Sexual Behavior and Identity.” *Journal of Urban Health* 83(5). 970–79. <https://doi.org/10.1007/s11524-006-9096-8>.

■ King, Michael, Eamonn McKeown, James Warner, Angus Ramsay, Katherine Johnson, Clive Cort, Lucie Wright, Robert Blizard, and Oliver Davidson. (2003). “Mental Health and Quality of Life of Gay Men and Lesbians in England and Wales: Controlled, Cross-Sectional Study.” *British Journal of Psychiatry* 183(6). 552–58. <https://doi.org/10.1192/03-207>.

■ King, Michael, Joanna Semlyen, Sharon See Tai, Helen Killaspy, David Osborn, Dmitri Popelyuk, and Irwin Nazareth. (2008). “A Systematic Review of Mental Disorder, Suicide, and Deliberate Self Harm in Lesbian, Gay and Bisexual People.” *BMC Psychiatry* 8(1). 70. <https://doi.org/10.1186/1471-244X-8-70>.

■ Knight, K. and Tamar Mattis, S. (2017). “*I Want to Be Like Nature Made Me*” *Medically Unnecessary Surgeries on Intersex Children in the US*.” Human Rights Watch and InterACT. <https://www.hrw.org/report/2017/07/25/i-want-be-nature-made-me/medically-unnecessary-surgeries-intersex-children-us>

■ Landers, Stewart J., Matthew J. Mimiaga, and Kerith J. Conron. (2011). “Sexual Orientation Differences in Asthma Correlates in a Population-Based Sample of Adults.” *American Journal of Public Health* 101(12). 2238–41. <https://doi.org/10.2105/AJPH.2011.300305>.

■ Lawn, W., Aldridge, A., Xia, R., & Winstock, A. R. (2019). Substance-Linked Sex in Heterosexual, Homosexual, and Bisexual Men and Women: An Online, Cross-Sectional "Global Drug Survey" Report. *The journal of sexual medicine*. 16(5). 721–732. <https://doi.org/10.1016/j.jsxm.2019.02.018>

■ Liu, Richard T., Ana E. Sheehan, Rachel F. L. Walsh, Christina M. Sanzari, Shayna M. Cheek, and Evelyn M. Hernandez. (2019). “Prevalence and Correlates of Non-Suicidal Self-Injury among Lesbian, Gay, Bisexual, and Transgender Individuals: A Systematic Review and Meta-Analysis.” *Clinical Psychology Review* 74. 101-783. <https://doi.org/10.1016/j.cpr.2019.101783>.

■ Looijenga, Leendert H., Remko Hersmus, J. Wolter Oosterhuis, Martine Cools, Stenvert Drop L. and Katja P. Wolffenbuttel. (2007). Tumor risk in disorders of sex development (DSD). *Best practice & research. Clinical endocrinology & metabolism*. 21(3). 480–495. <https://doi.org/10.1016/j.beem.2007.05.001>

■ Luk, Jeremy W., Jacob M. Miller, Stephen E. Gilman, Leah M. Lipsky, Denise L. Haynie, and Bruce G. Simons-Morton. (2018). “Sexual Minority Status and Adolescent Eating Behaviors, Physical Activity, and Weight Status.” *American Journal of Preventive Medicine* 55(6). 839–47. <https://doi.org/10.1016/j.amepre.2018.07.020>.

■ Machalek, Dorothy A., Mary Poynten, Fengyi Jin, Christopher K. Fairley, Annabelle Farnsworth, Suzanne M. Garland, Richard J. Hillman, Kathy Petoumenos, Jennifer Roberts, Sepehr N. Tabrizi, David J. Templeton, and Andrew E. Grulich. (2012). “Anal Human Papillomavirus Infection and Associated Neoplastic Lesions in Men Who Have Sex with Men: A Systematic Review and Meta-Analysis.” *The Lancet Oncology* 13(5). 487–500. [https://doi.org/10.1016/S1470-2045\(12\)70080-3](https://doi.org/10.1016/S1470-2045(12)70080-3).

■ Marti-Pastor, Marc, Gloria Perez, Danielle German, Angels Pont, Olatz Garin, Jordi Alonso, Mercè Gotsens, and Montse Ferrer. (2018). “Health-Related Quality of Life Inequalities by Sexual Orientation: Results from the Barcelona Health Interview Survey” *PLOS ONE* 13(1) <https://doi.org/10.1371/journal.pone.0191334>.

■ Matthews, Derrick D., and Joseph G. L. Lee. (2014). “A Profile of North Carolina Lesbian, Gay, and Bisexual Health Disparities, 2011.” *American Journal of Public Health* 104(6). 98–105. <https://doi.org/10.2105/AJPH.2013.301751>.

■ Maxwell, Steven, Maryam Shahmanesh, and Mitzy Gafos. (2019). “Chemsex Behaviours among Men Who Have Sex with Men: A Systematic Review of the Literature.” *International Journal of Drug Policy* 63. 74–89. <https://doi.org/10.1016/j.drugpo.2018.11.014>.

■ Mays, Vickie M., Robert-Paul Juster, Timothy J. Williamson, Teresa E. Seeman, and Susan D. Cochran. (2018). “Chronic Physiologic Effects of Stress Among Lesbian, Gay, and Bisexual Adults: Results From the National Health and Nutrition Examination Survey.” *Psychosomatic Medicine* 80(6). 551–63. <https://doi.org/10.1097/PSY.0000000000000600>.

■ McBee-Strayer, Sandra M., and James R. Rogers. (2002). “Lesbian, Gay, and Bisexual Suicidal Behavior: Testing a Constructivist Model.” *Suicide and Life-Threatening Behavior* 32(3). 272–83. <https://doi.org/10.1521/suli.32.3.272.22171>.

■ McCabe, Sean Esteban, Tonda L. Hughes, Wendy B. Bostwick, Brady T. West, and Carol J. Boyd. (2009). “Sexual Orientation, Substance Use Behaviors and Substance Dependence in the United States.” *Addiction* 104(8). 1333–45. <https://doi.org/10.1111/j.1360-0443.2009.02596.x>.

■ McElroy, Jane A., Jenna J. Wintemberg, and Amy Williams. (2015). “Comparison of Lesbian and Bisexual Women to Heterosexual Women’s Screening Prevalence for Breast, Cervical, and Colorectal Cancer in Missouri.” *LGBT Health* 2(2). 188–92. <https://doi.org/10.1089/lgbt.2014.0119>.

■ McLaughlin, Katie A., Mark L. Hatzenbuehler, Ziming Xuan, and Kerith J. Conron. (2012). “Disproportionate Exposure to Early-Life Adversity and Sexual Orientation Disparities in Psychiatric Morbidity.” *Child Abuse & Neglect* 36(9). 645–55. <https://doi.org/10.1016/j.chiabu.2012.07.004>.

■ Meyer, Ilan H. (2003). “Prejudice, Social Stress, and Mental Health in Lesbian, Gay, and Bisexual Populations: Conceptual Issues and Research Evidence.” *Psychological Bulletin* 129(5). 674–97. <https://doi.org/10.1037/0033-2909.129.5.674>.

■ Mikolajczak, Jochen, Harm J. Hospers, and Gerjo Kok. (2006). “Reasons for Not Taking an HIV-Test Among Untested Men Who Have Sex with Men: An Internet Study.” *AIDS and Behavior* 10(4). 431–35. <https://doi.org/10.1007/s10461-006-9068-8>.

■ Parker, Lacie L., and Jennifer A. Harriger. (2020). “Eating Disorders and Disordered Eating Behaviors in the LGBT Population: A Review of the Literature.” *Journal of Eating Disorders* 8(1). 51. <https://doi.org/10.1186/s40337-020-00327-y>.

■ Patterson, Joanne G., and Jennifer M. Jabson. (2018). “Sexual Orientation Measurement and Chronic Disease Disparities: National Health and Nutrition Examination Survey, 2009–2014.” *Annals of*

- Epidemiology* 28(2):72–85. <https://doi.org/10.1016/j.annepidem.2017.12.001>.
- Peitzmeier, Sarah M., Karishma Khullar, Sari L. Reisner, and Jennifer Potter. (2014). “Pap Test Use Is Lower Among Female-to-Male Patients Than Non-Transgender Women.” *American Journal of Preventive Medicine* 47(6). 808–12. <https://doi.org/10.1016/j.amepre.2014.07.031>.
 - Quinn, Gwendolyn P., Julian A. Sanchez, Steven K. Sutton, Susan T. Vadaparampil, Giang T. Nguyen, B. Lee Green, Peter A. Kanetsky, and Matthew B. Schabath. (2015). “Cancer and Lesbian, Gay, Bisexual, Transgender/Transsexual, and Queer/Questioning (LGBTQ) Populations: Cancer and Sexual Minorities.” *CA: A Cancer Journal for Clinicians* 65(5). 384–400. <https://doi.org/10.3322/caac.21288>.
 - Reilly, A. (2006). “Is Internalized Homonegativity Related to Body Image?” *Family and Consumer Sciences Research Journal* 35(1). 58–73. <https://doi.org/10.1177/1077727X06289430>.
 - Reisner, Sari L., Kristi E. Gamarel, Emilia Dunham, Ruben Hopwood, and Sel Hwahng. (2013). “Female-to-Male Transmasculine Adult Health: A Mixed-Methods Community-Based Needs Assessment.” *Journal of the American Psychiatric Nurses Association* 19(5). 293–303. <https://doi.org/10.1177/1078390313500693>.
 - Roberts, Andrea L., Margaret Rosario, Heather L. Corliss, Karestan C. Koenen, and S. Bryn Austin. (2012). “Elevated Risk of Posttraumatic Stress in Sexual Minority Youths: Mediation by Childhood Abuse and Gender Nonconformity.” *American Journal of Public Health* 102(8). 1587–93. <https://doi.org/10.2105/AJPH.2011.300530>.
 - Robinson, K., Ky Galloway, S. Bewley, and C. Meads. (2017). “Lesbian and Bisexual Women’s Gynaecological Conditions: A Systematic Review and Exploratory Meta-analysis.” *BJOG: An International Journal of Obstetrics & Gynaecology* 124(3). 381–92. <https://doi.org/10.1111/1471-0528.14414>.
 - Rosario, Margaret, Fei Li, David Wypij, Andrea L. Roberts, Heather L. Corliss, Brittany M. Charlton, A. Lindsay Frazier, and S. Bryn Austin. (2016). “Disparities by Sexual Orientation in Frequent Engagement in Cancer-Related Risk Behaviors: A 12-Year Follow-Up.” *American Journal of Public Health* 106(4). 698–706. <https://doi.org/10.2105/AJPH.2015.302977>.
 - Rosenwohl-Mack, Amy, Suegee Tamar-Mattis, Arlene B. Baratz, Katharine B. Dalke, Alesdair Ittelson, Kimberly Zieselman, and Jason D. Flatt. (2020). “A National Study on the Physical and Mental Health of Intersex Adults in the U.S.” *PLOS ONE* 15(10). <https://doi.org/10.1371/journal.pone.0240088>.
 - Ryan, C., D. Huebner, R. M. Diaz, and J. Sanchez. (2009). “Family Rejection as a Predictor of Negative Health Outcomes in White and Latino Lesbian, Gay, and Bisexual Young Adults.” *PEDIATRICS* 123(1). 346–52. <https://doi.org/10.1542/peds.2007-3524>.
 - Sandfort, Theo G. M., Ron de Graaf, Margreet ten Have, Yusuf Ransome, and Paul Schnabel. (2014). “Same-Sex Sexuality and Psychiatric Disorders in the Second Netherlands Mental Health Survey and Incidence Study (NEMESIS-2).” *LGBT Health* 1(4):292–301. <https://doi.org/10.1089/lgbt.2014.0031>.
 - Schuler, Megan S., and Rebecca L. Collins. (2020). “Sexual Minority Substance Use Disparities: Bisexual Women at Elevated Risk Relative to Other Sexual Minority Groups.” *Drug and Alcohol Dependence* 206. 107755. <https://doi.org/10.1016/j.drugalcdep.2019.107755>.
 - Semlyen, Joanna, Michael King, Justin Varney, and Gareth Hagger-Johnson. (2016). “Sexual Orientation and Symptoms of Common Mental Disorder or Low Wellbeing: Combined Meta-Analysis of 12 UK Population Health Surveys.” *BMC Psychiatry* 16(1). 67. <https://doi.org/10.1186/s12888-016-0767-z>.
 - Siever, Michael D. (1994). “Sexual Orientation and Gender as Factors in Socioculturally Acquired Vulnerability to Body Dissatisfaction and Eating Disorders.” *Journal of Consulting and Clinical Psychology* 62(2). 252–60. <https://doi.org/10.1037/0022-006X.62.2.252>.
 - Smiley, Adam, Aisa Burgwal, Carolina Orre, Edward Summanen, García Nieto Isidro, Jelena Vidić, Joz Motmans, Julia Kata, Natia Gvianishvili, Vierge Hård, and Richard Köhler. (2017). *Overdiagnosed but Underserved. Trans Healthcare in Georgia, Poland, Serbia, Spain, and Sweden: Trans Health Survey*. Transgender Europe.
 - Tomkins, Andrew, Ryan George, and Merav Kliner. (2019). “Sexualised Drug Taking among Men Who Have Sex with Men: A Systematic Review.” *Perspectives in Public Health* 139(1). 23–33. <https://doi.org/10.1177/1757913918778872>.
 - Tracy, J. Kathleen, Nicholas H. Schluterman, and Deborah R. Greenberg. 2013. “Understanding Cervical Cancer Screening among Lesbians: A National Survey.” *BMC Public Health* 13(1). 442. <https://doi.org/10.1186/1471-2458-13-442>.
 - Tyutyusheva, Nina, Ilaria, Mancini, Giampiero Igli Baroncelli, Sofia D’Elios, Diego Peroni, Maria Cristina Meriggiola and Silvano Bertelloni. (2021). Complete Androgen Insensitivity Syndrome: From Bench to Bed. *International journal of molecular sciences*, 22(3), 1264. <https://doi.org/10.3390/ijms22031264>
 - Walters, Mikel L, Jieru Chen, Matthew J. Breiding. 2013. The National Intimate Partner and Sexual Violence Survey (NISVS): (2010) Findings on Victimization by Sexual Orientation. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
 - van Drimmelen-Krabbe, Jenny J. (1994). “Homosexuality in the International Classification of Diseases: A Clarification.” *JAMA: The Journal of the American Medical Association* 272 (21). 1660. <https://doi.org/10.1001/jama.1994.03520210044029>.
 - Ward, Brian W., Sarah S. Joestl, Adena M. Galinsky, and James M. Dahlhamer. (2015). “Selected Diagnosed Chronic Conditions by Sexual Orientation: A National Study of US Adults, 2013.” *Preventing Chronic Disease* 12. 150–292. <https://doi.org/10.5888/pcd12.150292>.
 - Whitbeck, Les B., Xiaojin Chen, Dan R. Hoyt, Kimberly A. Tyler, and Kurt D. Johnson. (2004). “Mental Disorder, Subsistence Strategies, and Victimization among Gay, Lesbian, and Bisexual Homeless and Runaway Adolescents.” *Journal of Sex Research* 41(4). 329–42. <https://doi.org/10.1080/00224490409552240>.
 - Witcomb, Gemma L., Walter Pierre Bouman, Nicola Brewin, Christina Richards, Fernando Fernandez-Aranda, and Jon Arcelus. (2015). “Body Image Dissatisfaction and Eating-Related Psychopathology in Trans Individuals: A Matched Control Study: Trans Individuals and Eating Disorder Risk.” *European Eating Disorders Review* 23(4). 287–93. <https://doi.org/10.1002/erv.2362>.
 - Wolitski, Richard J. (2005). “The Emergence of Barebacking Among Gay and Bisexual Men in the United States: A Public Health Perspective.” *Journal of Gay & Lesbian Psychotherapy* 9(3–4). 9–34. https://doi.org/10.1300/J236v09n03_02.
 - Wu, Lezhou, Randall L. Sell, Alexis M. Roth, and Seth L. Welles. 2018. “Mental Health Disorders Mediate Association of Sexual Minority Identity with Cardiovascular Disease.” *Preventive Medicine* 108. 123–28. <https://doi.org/10.1016/j.ypmed.2018.01.003>.
 - Zaritsky, Eve, and Suzanne L. Dibble. (2010). “Risk Factors for Reproductive and Breast Cancers among Older Lesbians.” *Journal of Women’s Health* 19(1). 125–31. <https://doi.org/10.1089/jwh.2008.1094>.
 - Zeeman, Laetitia, and Kay Aranda. (2020). “A Systematic Review of the Health and Healthcare Inequalities for People with Intersex Variance.” *International Journal of Environmental Research and Public Health* 17(18). 6533. <https://doi.org/10.3390/ijerph17186533>.

Chapter 4. — Establishing inclusive healthcare

What should we do?



4.1) General issues

The difficulties of coming out in a healthcare setting are rooted in the presence of heterosexism, homophobia and cisnormativity in the system and at an institutional level (Brotman et al. 2002). Previous studies have indicated that coming out has a central role in the experience of health and well-being for the LGBTI population, therefore it is necessary to enhance an LGBTI-positive service in order to support and facilitate the coming out process during healthcare encounters (Brotman et al. 2002; Rosario et al. 2001). (For detailed information on coming out see Chapter 1.6 and Chapter 3.1.)

thology and deviance in the everyday life and in clinical settings. Targeting health equality on an institutional level is highly desired. Institutional policies, organised opportunities for training on minority populations, healthcare facilities' environment and communication about health equity and diversity have a key role in creating an inclusive healthcare system. A comprehensive guide for best practises on LGBTI health and wellbeing should be established and maintained for professional associations, institutions and health professionals, and this guide should provide general information on LGBTI health and specific knowledge on the various fields or specialities where it is going to be used.

4.1.1) Institutional level – creating safe places

Although as a major milestone for LGBTI equality, in 1973 the American Psychiatric Association (APA), the largest professional organisation in the field of psychiatry had stated that that homosexuality was not a mental illness, and thus homosexuality was removed from the DSM, non-heterosexual, non-cisgender individuals have been historically stigmatised by the ideologies of pa-

4.1.1.a) Anti-discrimination and inclusive health policies

Institutions should support visibility with written equality and diversity policies, in which it is stated that the institution does not tolerate discrimination on the basis of sexual orientation or gender identity. These policies should provide information for those who can experience it about the institution's strategy on handling anti-LGBTI bullying, harassment or disrespectful

treatment with advice in handling such events, the opportunities of gaining support, and the exact steps of making a report on the event when it is necessary. Both staff-members and patients should be aware that any kind of discrimination is unacceptable and understand their opportunity for reporting, and the institution's process of handling such events.

All institutions should monitor data on patients' satisfaction and experiences during healthcare encounters in order to gain information on biases, weaknesses, strengths and key points of anti-discriminatory policies implementation at the institutional level. Gaining feedback from staff members, patients, visitors, and the LGBTI community could help in organising the efforts in meeting patients' needs.

Policy initiatives that focus on social justice and equality in health can do a lot to induce a shift in attitudes, remove barriers and create a more accepting environment for LGBTI patients. Therefore, policymakers have a key role in addressing equity, safety and equal access in health.

Developing and adopting a policy ensuring LGBTI patients the right of equal visitation by integrating a broader and more inclusive definition of "family" in healthcare policies would be desired. LGBTI individuals are often isolated from their family on the basis of their sexual orientation, gender identity, or variant sex characteristics or lack any family members (because they do not have children or any close relations who could support them). Therefore, patients should have the right to safely identify the support person during their examination or hospital stay or to name a reliable and supporting surrogate decision-maker. A register of surrogate decision-makers could be set up as an online data register containing the name and contact information of the surrogate decision-makers and as part of general health information, it should be made available to health providers in case of necessity. In addition, visitation rights should

not be limited to family members or registered partners, but any friends or contacts by the patient's wish, any person who plays a significant role in the patient's life even if not legally related.

4.1.1.b) Multicultural and diverse environment

Welcoming environment

Healthcare environment should be transformed into a more welcoming, safe, and inclusive environment for LGBTI patients and their families (Oakbrook Terrace, IL: The Joint Commission; 2010). Sexual and gender minority individuals necessarily screen their environment (e.g., hospital waiting rooms, physicians' office, restrooms, etc.) for clues to help them identify what information they can comfortably and safely share with their healthcare provider. In order to make LGBTI clients or patients feel safe and supported, institutions might create a more inclusive clinical environment by the following (Makadon et al. 2015; GLMA, 2006; Royal College of Nursing and UNISON, 2004; Ashworth 2012):

1. Display of posters in the health facility which promote diversity and highlight support, by representing racially and ethnically diverse same-sex couples and rainbow families, non-cisgender people, posters from LGBTI support groups or organisations, or HIV/AIDS organisations.
2. Placing LGBTI-linked symbols or stickers in waiting rooms and examination rooms (e.g., rainbow flag, pink triangle, unisex bathroom signs).
3. Displaying brochures about recommended health screenings by age and gender, which contain information on LGBTI specific health issues, and other booklets or leaflets about LGBTI health concerns, such as safer sex, hormone therapy, mental health, substance use, and sexually transmitted diseases or illnesses.

4. Displaying LGBTI-specific media, including local or national magazines or newsletters about and for LGBTI individuals.
5. Celebrating in the facility such events as World AIDS Day, LGBTI Pride Month, and International Transgender Day of Visibility.
6. Marking single-occupancy bathrooms "All Genders." If this is not possible, introducing a policy allowing trans and intersex patients to use the bathroom that most closely matches their needs.
7. Adjusting patient registration forms for recording of demographic information and health records (e.g.: legal name, preferred name, gender identity and pronoun).
8. Promoting visibility of LGBTI staff by creating a safe and comfortable atmosphere encouraging people to come out.
9. Becoming familiar with online and local resources available for LGBTI people (web-pages, non-profit organisations).

Diversity and intergroup contact

Allport's intergroup contact theory evolved originally for racial and ethnic encounters, but it can be extended to other groups. It states that certain direct connections between members of different groups may reduce stigmatisation, prejudice levels, and enhance open-mindedness (Major, Mendes and Dovidio, 2013; Licciardello, Castiglione and Rampullo, 2011; Hewstone and Voci, 2009; Pettigrew and Tropp, 2006; Jones et al. 2000). Intergroup contact enhances knowledge about the outgroup and better knowledge usually means more positive attitudes (Steffens 2004; Szél et al. 2020; Banwari et al. 2015; Dunjić-Kostić et al. 2012; Grabovac et al. 2014; Lopes, Gato and Esteves 2016). It reduces the levels of physiological stress and self-reported anxiety in connection with members of the outgroup, in addition it encourages people to take the perspective of outgroup members, therefore increasing empathy. Out LGBTI faculty members and health professionals may have a positive influence on medical students' and colleagues' attitudes to-

wards the LGBTI community (Kelley et al. 2008; Sequeira, Chakraborti and Panuntim 2012).

Institutions should support applications of LGBTI or other minority employees in order to create a more diverse environment, and opportunity for intergroup contact.

Training

It is recommended to promote specific training on LGBTI health issues for all staff members (including administrative and cleaning staff) and incorporate LGBTI-related information and elements on promoting equal opportunities into mandatory courses. In the aim of greater access to training programs on LGBTI issues it is better if these trainings are offered free of charge or are financed and supported by the institution. It is important to educate staff why a patient's sexual orientation, gender identity and sex characteristics are relevant in order to give and gain proper care. These trainings should also prepare hospital staff to be able to gain information by asking patients about their sexual orientation and gender identity in a proper, non-intrusive way, without assumptions. These training sessions need to cover how staff members should accept, handle and support patients' coming out and their family relations. Health professionals must be able to explain to patients clearly why information on gender, sexual identity and sex characteristics needs to be collected and ensure them that the information given would be handled confidentially and sensitively.

4.1.1.c) Other considerations

IT systems and data management should be able to register information on non-cisgender identity and sexual orientation and should also ensure that data related to gender identity and sexual orientation is handled and stored in a prudent, confidential and secure manner.

4.1.2) Personal level – the use of language, implicit and explicit attitudes

LGBTI individuals often experience discrimination or prejudice from health workers when seeking care, and their prior negative experiences with healthcare professionals may lead to delaying or rejecting seeking help. Personal interviews, intake forms and physical examinations are very important opportunities for medical professionals to establish a trusting, respectful and supportive doctor-patient relationship. On the individual level, health professionals have the opportunity to create a safe environment for LGBTI patients in the healthcare system by active listening and respectful affirmative communication.

Healthcare provider-patient interactions demand a mindful non-judgmental attitude, respect and empathy in all cases. Just like other patients, LGBTI individuals might come from different backgrounds (in terms of age, ethnicity or race, socioeconomic status, education etc.), and hold different positions or have various professions. When we meet LGBTI individuals who trust us enough to disclose their sexual orientation or gender identity, it may be important to ask them about their previous experiences during healthcare interactions and encourage them to give us feedback on the current encounter.

It is recommended to examine our own values and beliefs in order to recognise any hidden or unconscious prejudices and stereotypes that can create barriers to our learning, personal development and the work we are involved in. Our values and beliefs can openly or unconsciously impact our attitudes and the way we deal with individuals from different groups in cross-cultural interactions. We all have prejudices, hidden biases and participating in diversity training and increasing self-awareness are useful tools for uncovering them. The more knowledge we have

about cultural diversity, the more likely we are able to properly serve diverse and multicultural communities. Knowledge and self-reflection can give us the opportunity to learn the right skills and practises to manage differences efficiently and handle cross-cultural interactions.

4.1.2.a) A self-reflexion tool

Having stereotypes is not all wrong: according to Macrae and colleagues, we use categorical thinking and stereotypes in order to simplify our experiences and to reduce the complexity of our world when processing our surroundings. Stereotyping, though, can be extremely harmful as it can easily lead to stigmatisation or discrimination. We can measure attitudes or stereotypes in a direct (explicit) or non-direct (implicit) way. Explicit attitudes are usually more accepting due to social norms and the invisibility of unconscious biases. Implicit attitudes are estimated in a more indirect way, by measuring the strength of associations between concepts and stereotypes, therefore revealing unconscious attitudes more efficiently. The majority of heterosexual persons (84%) and more than one-third of gay and lesbian (38%) individuals hold implicit biases toward sexual and gender minorities (Makadon et al. 2015).

We can reduce the effect of our biases if we reflect on our personal beliefs and attitudes related to LGBTI people. This tool can be helpful in order to increase awareness of our implicit attitudes as well as to measure stigma within services:

Assessing Personal Biases:

- Do you think that lesbian, gay, bisexual, trans or intersex people should not hold certain jobs or social positions? If so, why?
- Have you ever stopped yourself from doing or saying something because you might be perceived as gay or lesbian?
- Have you ever stopped yourself from doing

- or saying something because you might be perceived as too masculine or feminine?
- How do you think you would feel if a family member came out as a lesbian, gay, bisexual, transgender, or intersex person?
- How do you think you would feel if an established patient suddenly came out as a lesbian, gay, bisexual, transgender, or intersex person?

Values and Attitudes:

What are your first reactions to the following statements? How strongly do you agree or disagree and why?

- Gay, lesbian and bisexual people could change their sexual orientation if they really wanted to.
- I am comfortable talking with my patients about sexual behaviours other than penile-vaginal intercourse.
- Being a gay, bisexual, lesbian, trans or intersex person is a lifestyle choice.
- I feel uncomfortable when I see two men holding hands in public.
- I would be upset if someone thought I was gay or lesbian.
- I would be uncomfortable dating someone who is a bisexual, trans or intersex person.
- If a child of mine came out as lesbian, gay, bisexual, transgender or intersex, I would think I did something wrong as a parent.

Legal, policy and operational environment:

How strongly do you agree or disagree with the following statements and why?

- My health facility has policies to protect LGBTI clients or patients from discrimination.
- I will get into trouble at work if I do not follow the policies to protect patients who are LGBTI.
- In my health facility I've never heard anyone

- talking badly about LGBTI people.
- Health professionals in my institution wouldn't have any difficulty working with a colleague who is LGBTI, regardless of their responsibilities.
- Since I have been working at my institution, I have been trained in protecting the confidentiality of patients' HIV status.

We develop our biases and stereotypes in order to protect ourselves and our group identities, therefore it is not an easy task to give up stereotypes. Scrutinising the potential harm and the consequential unfairness of our prejudices or investigating the circumstances or reasons for developing our beliefs and the way they serve us might help us to get rid of our prejudices and biases.

- How do my beliefs serve me?
- What might I lose if I change my beliefs?
- What are the costs of maintaining my current perspective?
- How might it benefit me to change?

4.1.2.b) General anamnesis (questions for effective and accepting patient-doctor communication)

Taking medical history should always be completed in an emphatic and respectful manner. During any aspect of medical history, we should use gender-neutral expressions and refrain from questions that suggest assumptions on a patient's gender identity or sexual orientation. The best is to ask open-ended questions and listen to how patients describe themselves and their partners. Unless the terms the patient used sound derogatory, it is recommended to use the same expressions. As we detailed in **Chapter 2.**, sexual orientation, gender identity and sex characteristics have complex and pervasive effects on one's mental and physical health, therefore we should facilitate the disclosure of gender identity or sex-

ual orientation in order to offer better care for LGBTI individuals. We must be aware, though, that coming out is a highly sensitive process and we must respect patients’ choice about it.

It would be important to collect information on a patient's sexual orientation, gender identity or body characteristics without normative assumptions as part of their medical records. Therefore, LGBTI patients would not be forced to explain their circumstances over and over every time they visit a healthcare provider. We recommend including LGBTI sensitive questions in intake forms, such as pronoun(s) used, the name used by the person or the name of their partner. It can help avoid misunderstandings and false assumptions and increase LGBTI patients’ comfort and confidence.

In addition to general medical history, surgical history and family history, some risk behaviours, mental or physical health issues are important to clarify with LGBTI patients, such as: being overweight and obesity, smoking, using alcohol or drugs, being exposed to significant stress, eating disorders, risk for cancers: HPV associated tumours and breast cancer, violence, victimisation: hate crimes, domestic violence. We should encourage all LGBTI patients to participate in screenings, because LGBTI individuals face a higher number of risk factors for diabetes and cardiovascular diseases, lesbian and bisexual women have more risk factors for breast cancer, cervical cancer and ovarian tumours, the MSM population has higher number risk factors for prostate, colon, anal and testicular cancer, and trans individuals should have regular screenings in accordance with their current anatomy, the received hormone therapy and sex assigned at birth.

It is important to establish a secure and trustful relationship with the patient before discussing sexual history (CDC 2019; Makadon et al. 2015). If a caregiver, relative or partner is in the examination room, politely ask that person to step into the

waiting room before starting to discuss sexual health with your patient. We should begin the discussion with some comforting explanation, such as “I’m going to ask you a few questions about your sexual health. These questions might be very personal, but sexual health is very important to overall health. I ask all my patients these questions regardless of age, gender or sexual orientation.”

When discussing sexual history, it is even more important to use the patients’ own terms and to reflect their language and terminology used for describing partners and behaviours. People may or may not choose to identify by a sexual orientation or gender identity. We should also be aware that how someone self-identifies and what sexual behaviour they engage in can be dissimilar and might change over time.

If our patient uses any unfamiliar terms or behaviours, within certain limits and to the extent justified by the current situation we should ask them to clarify it or repeat it. Acknowledge that the patient might be embarrassed when discussing sexual issues and be aware of your own feelings. Be prepared to discuss sexual behaviour and sexual orientation with your patients and to manage if a patient’s description is uncomfortable, unknown, or embarrassing to you. Even if the situation makes you feel uncomfortable or embarrassed, you should pay attention to your non-verbal and verbal communication in order to express open-mindedness (CDC 2019; Makadon et al. 2015). Keep in mind that not everyone is sexually active and that regardless of whether one has sex with a person of the same or opposite sex, a person is not necessarily gay, lesbian, bisexual, or does not necessarily identify with any sexual orientation. It can be supportive for the patient and it helps avoid miscommunication. We should refrain from unnecessary curiosity and from using patients with the aim of gathering information on the LGBTI community.

When assessing the sexual history of trans and intersex people, we should pay attention to a few additional issues:

- Do not make assumptions about the patient’s behaviour or body based on their appearance.
- Clarify whether the patient has had any gender-reaffirming surgery with the aim of identifying what risk factors we should be concerned about and discuss with them.
- Take into account that discussion of genitals or sexual activity may be complicated by disassociation with their body, and this can make the interview sensitive or stressful to the patient.

Confidentiality is highly important in the case of LGBTI identities, so you must not discuss your patient’s sexual orientation, gender identity or body characteristics with those who do not need to know it in order to provide them adequate care; otherwise, patients can be easily retraumatized by experiencing loss of confidence. Privacy policies concerning all patients also apply to this very sensitive information!

In addition, it is recommended to create and maintain a list of LGBTI-friendly referrals in order to better serve patients by referring them to LGBTI-affirmative colleagues and to make sure to recommend them LGBTI health-specific screenings.

4.1.2.c) Physical examination

Physical examination is one of the most sensitive parts of the healthcare provider-patient encounter, and even under the right conditions and with the proper precautions it can be very intrusive and can put the patient in an especially vulnerable position. The physical examination can be even more disturbing for patients who experience shame or dissatisfaction about their bodies due to body image expectations (such as

non-compliance with the beauty ideal, being overweight, physical disability, unexpected anatomies, etc.), or the anxiety, distress or discomfort caused by the existence or lack of any organs concordant with their gender identity. Physical examination can be very challenging for individuals who have previous negative experiences with health professionals.

The examination of any private parts including the breasts, anus and genitals is very uncomfortable for most people, and especially threatening for intersex and trans individuals, but a proper general examination and some of the regular cancer screenings make it inevitable. Before any physical examination, it is recommended to ask about patients’ previous experiences and normalise the anxiety they express. If possible, ask patients about their preferences in connection with the language and terms you use (e.g., “pelvic opening” instead of “vagina”) and about what could make them more comfortable, e.g., having another provider (someone of the same sex as the patient) perform the examination, having their support person in the examination room or outside in the waiting room during the examination. Clarify the role of everyone in the examination room, in order to ensure the patient's sense of security. Always ask for the patient's permission before touching them or performing any examination or using instruments on their body and tell them about the process and purpose of the current examination. Assure patients that they may express or share any discomfort or negative sensations during the examination and may ask you to suspend or stop the exam at any time and that you will do so immediately. If they express their wish to stop the exam, you must respect their request!

If the examination was successful, inform the patient about it and thank them for their cooperation. If the exam did not succeed or was terminated for reasons beyond the control of the patient, explain it to the patient. If the examination was aborted or unsuccessful because of

the patient’s wish to stop the exam, or due to the patient’s anxiety, validate their wish and their feeling for the purpose of preventing retraumatisation. The majority of patients consider the lack of completion of the exam – for any reason – their own failure.

It is also important to avoid unnecessary examinations and highlight that curiosity about a trans or intersex patient’s present anatomy with no current medical relevance is not considered as a justified examination. We should be aware of the fact that many LGBTI patients report mistreatment or abuse in connection with receiving care in the healthcare system or in their everyday lives, therefore it is important to notice that performing physical examinations can provoke PTSD in traumatised individuals. If we meet any patient with presumed or diagnosed PTSD symptoms, we should refer them to adequate mental healthcare where they can get proper help in an affirmative and supporting environment where they can understand their traumatic experience and learn skills in order to deal with the traumatic symptoms.

4.1.2.d) Incorrect assumptions

The dominant discourses on sexual orientation, gender identity and sex characteristics result in health practices which fail to address the specific needs of LGBTI individuals and maintain their isolation and vulnerability (Brotman et al. 2002). Heteronormativity and cisnormativity in healthcare settings show up when the doctor assumes that all female patients need contra-

ception, when lesbian couples are excluded from IVF treatment, when trans or intersex individuals are being misgendered, or when health promotion posters and programs lack any LGBTI individuals.

If it is necessary, we can clarify our assumptions before meeting a new patient in order to fulfil patient-centred care (Makadon et al. 2015):

- Do I have any assumptions?
- What are these assumptions?
- Which of those assumptions prevents me from being present for and being open-minded toward this patient?
- What are my possibilities to set my assumptions aside during this encounter?

We must declare that it is not possible to recognise someone’s gender identity, sex characteristics or sexual orientation based on their name, appearance, or the sound of the voice. Using the wrong pronoun, name, gender or a false assumption about sexual orientation can cause embarrassment and indignity for anyone. Therefore, it’s always best not to make any assumptions about someone’s sexual orientation, gender identity or sex characteristics based just on their looks (GLMA 2006; Makadon et al. 2015).

Do not assume all patients are heterosexual or cisgender or diadic (non-intersex) people (The Fenway Institute, 2016). You may find these questions useful. When asking them you will not only get more proper information related to your patient but also show your support and acceptance for sexual diversity among humans.

<i>Not suggested</i>	<i>Suggested</i>
Are you married?	Do you have a partner? Who are the members of your family?
Do you have a girlfriend (to male)/ boyfriend (to female patient)?	Are you in a relationship? Do you have a girlfriend or boyfriend? Are you in one or more relationships?
Have you ever had sex with women (to male)/ man (to female patient)?	Are you having sex? Who are you having sex with?

(CDC 2020; Haider et al. 2018; Makadon et al. 2015; Institute of Medicine (US) 2013; Bradford et al. 2012; GLMA 2006)

lack of experience. Misused expressions, stigmatising terms, misgendering and other miscommunication have adverse effects on patient – provider interaction.

4.1.2.e) Pronouns and preferred expressions

Medical professionals often use medicalizing and stigmatizing language when addressing gender identity and sexual orientation due to the lack of LGBTI sensitive and affirmative education and the

Some languages use gender neutral pronouns while other languages have gender specific pronouns. It is necessary to pay attention to the language we use and try to apply gender-neutral terms in communication with others and especially with non-binary or trans people.

<i>Not recommended</i>	<i>Recommended</i>
Are you a man or a woman?	What’s your name? I would like to be respectful. How do you prefer to be called? What pronouns do you use? What gender do you identify as now? What sex were you assigned at birth
Are you having sex change treatment?	Do you access gender-affirming healthcare? What are your goals for your life / for your care?
	Whom do you consider to be your family?
	What do you know about your diagnosis/ Your prognosis?

We all make mistakes. If you have expressed any assumptions, deadnamed or misgendered a patient, don't worry, simply politely apologise for using the wrong pronoun (or name). Such things can be learned. – “I’m learning how to be respectful and sometimes I make mistakes.” (CDC 2020; Haider et al. 2018; The Fenway Institute, 2016; Makadon et al. 2015; Institute of Medicine (US) 2013; Bradford et al. 2012)

4.1.2.f) Avoiding unnecessary or discriminative questions

Many LGBTI people – trans and intersex individuals and lesbians especially – are treated with inappropriate curiosity and subjected to unequal treatment because of gender identity or sexual orientation (Barbara Chaim and Doctor, 2004; Ellis, Bailey and McNeil 2015; Zeeman and Aranda 2020). LGBTI people are often asked medically irrelevant and intrusive questions about their personal lives, in case of non-cisgender identity even about their physical appearance, and sometimes they are subjected to unnecessary and invasive physical examinations.

Curiosity is an essential part of human nature, it is an important element which facilitates

learning, according to Ami Schattner it is “an established primary goal of medical education and an acknowledged component of professional competence (Schattner, 2015).” We can imagine curiosity as a spectrum, we can label one end as appropriate curiosity and the other as inappropriate curiosity (Sheperd, Hanckel and Guise, 2019). Inappropriate curiosity occurs when the question is unnecessarily personal or irrelevant from the medical point of view. Some people (even health professionals) could be curious about what it means to be a gay, lesbian, bisexual, intersex or trans person and want to ask questions to satisfy their own curiosity. Asking intrusive and inappropriate questions or using our patients as sources of information with the aim of gathering LGBTI-specific information is unprofessional and harmful, it can be considered as microaggression and does not serve the patient’s interests.

If you are not sure about asking something, enquire yourself:

- Is the question necessary to provide proper care?
- What do I know?
- What do I need to know?
- How can I ask that in a sensitive way?

Relevant and necessary for care:	Not relevant, intrusive/curious questions:
How has your pain interfered with your desire for sex?	How many sexual partners have you had in your lifetime?
What word or words would you use to describe your sexual orientation?	When did you know you were lesbian/gay/bisexual/trans?
	If you only had sex with men, how do you know you are bisexual?
Have you had any surgeries other than the ones we’ve discussed? Were there any complications?	Do you still have your penis?
	Are your breasts real?
What other drugs or hormones are you taking?	
What sex were you assigned at birth? What gender do you identify as now?	Are you truly trans or just seeking attention?

Suggested actions on individual level:

- Avoid making assumptions about someone’s sexual orientation, gender identity, gender expression or sex characteristics based on appearance.
- Be aware of your prejudices, biases, and stereotypes.
- Recognise that self-identification and behaviours do not always align.
- Always use the correct name and pronouns of patients, even when they are not present. Correct your colleagues if they use the wrong names and pronouns.
- Do not gossip or joke about LGBTI people. React if someone around you is doing so.
- Protect confidentiality. Only discuss a patient’s sexual orientation, gender identity

- or sex characteristics with those who need to know it.
- Pay special attention to health issues and disparities experienced more often by LGBTI people.
- If you feel well prepared to serve the LGBTI community, consider being listed in an LGBTI-Friendly Provider Directory (available in many countries).
- Always update your knowledge about LGBTI people by attending LGBTI-specific training and reading the literature just like in the case of any other professional qualifications you have.

(The Fenway Institute 2016; Makadon et al. 2015; Institute of Medicine (US) 2013; Bradford et al. 2012; GLMA 2006; Lee 2000)

4.2) Specific issues

Research conducted in the past years confirmed beyond doubt that LGBTI people experience significant health inequalities. Sexual and gender minorities face worse health outcomes compared with their heterosexual and cisgender peers. The health disparity partly results from ‘minority stress’: the chronic stress associated with being a member of a marginalised minority group. Due to this chronic minority stress, certain diseases are more prevalent among sexual and gender minority people. It is important however to emphasise that they are not linked with being a sexual or gender minority person in itself but to specific risk factors associated with minority status. Providers should not attribute the related problems to the patients’ sexual orientation, gender identities or sex characteristics – thus making them responsible for their health problems – but understand the connection of stigmatisation, social exclusion, discrimination, and harassment with the consequential risk behaviour in this vulnerable population.

Other sources of the health disparity are the barriers that make the access to healthcare more difficult for LGBTI people, such as lack of insurance, lack of culturally competent services or reluctance to seek medical care because of past experiences of discrimination and prejudice from health providers (McKay 2011). Healthcare workers have an important role in mitigating this health disparity, by providing culturally competent care for their sexual or gender minority patients.

4.2.1) Internal medicine

Pulmonary diseases are known to be more prevalent in sexual and gender minority groups, primarily in connection with the higher rates of smoking in this population.

Sexual and gender minority adults have higher rates of asthma than their heterosexual or cisgender counterparts (Gao and Mansh 2016; Heck and Jacobson 2006), especially lesbian and bisexual women (Meads et al. 2018) and bisexual men (Gonzales and Henning-Smith 2017; Ward et al. 2015). Asthma is caused by a mixture of genetic and environmental factors. It is associated with smoking – several studies showed higher rates of smoking or tobacco use among sexual and gender minorities (Cunningham et al. 2018; Jamal et al. 2018) – and with mood and anxiety disorders – these are also more prevalent in LGBTI populations (Wu et al. 2018).

Studies also found a higher prevalence of **chronic obstructive pulmonary disease** among sexual and gender minorities, especially among bisexual men and women (Gonzales and Henning-Smith 2017). In some studies, this increased risk is explained by the higher rates of tobacco use, though there are studies where the differences remain despite controlling for smoking (Patterson and Jabson 2018).

Cardiovascular diseases (CVD) are the leading cause of death, responsible for more than half of all deaths in European countries. The higher rate of risk factors (smoking, obesity, alcohol consumption, stress) suggests greater CVD risk in LGBTI populations and there are epidemiological studies confirming the higher prevalence of angina, myocardial infarction, stroke, hypertension and cardiovascular diseases among LGB people (Everett and Mollborn 2013; Wu et al. 2018). Studies calculating cardiovascular disease risk by examining individual risk factors or using the Framingham framework identified higher CVD risk in the LGB population (Caceres et al. 2018; Clark et al. 2015; Conron et al. 2010). Besides the modifiable risk factors – presence of obesity and smoking, lack of moderate physical activity, diabetes mellitus, hypertension and high chole-

sterol – minority stress might have a role in the CVD burden in the sexual and gender minority population. Studies describe the pathophysiological reaction to minority stress as an acute proinflammatory stress response leading to the dysregulation of metabolic, cardiovascular and immune biomarkers thus contributing to cardiovascular outcomes (Juster et al. 2015; Mays et al. 2018). Diabetes was found to be more prevalent among sexual minorities in several studies, but its prevalence tends to differ between sexual minority subgroups. Higher rates of diabetes mellitus were found in bisexual women but not lesbians (Meads et al. 2018). Gay and bisexual men were more likely to have a diabetes diagnosis than heterosexual men, even after controlling for age and BMI (Beach et al. 2018).

4.2.1.a) Recommendation for providers

The above findings indicate the importance of screening for the risk factors contributing to diseases that affect sexual and gender minority people. healthcare providers should be aware of these disparities and screen for the health problems and risk factors enumerated above in the LGBTI population. In primary healthcare settings, it is possible to use the opportunity and perform simple health checks such as measuring blood pressure, calculating BMI and asking about smoking or alcohol consumption even during a consultation held for other reasons. It may also be an opportunity to promote health – encourage the patient to follow a healthy diet, perform regular physical activity, not to smoke and use substances, consume none or moderate amounts of alcohol and obtain sufficient sleep daily.

4.2.1.b) Screening and intervention in primary healthcare settings

In general practice it is practical to use an appointment to assess health status and perform

simple health checks. In Hungary, it is recommended for general practitioners to screen every patient for cardiovascular risk factors: taking family anamnesis; lifestyle; physical examination including measuring weight, abdominal circumference, blood pressure and calculating BMI. In patients with abdominal obesity and those with high cardiovascular risk status, checking parameters for metabolic syndrome (triglyceride, cholesterol levels and blood sugar) is recommended.

LGBTI patients should be screened for smoking, using simple screening tools like the Fägerstrom Test For Nicotine Dependence (FTND, see in the appendix) or its shorter form, the Heaviness of Smoking Index (HSI) (Heatherton et al. 1991). Another screening tool, the Hooked on Nicotine Checklist (HONC, see in the appendix) was developed for assessing the strength of tobacco dependence specifically in adolescent smokers.

For problem drinking and alcohol dependence, CAGE or AUDIT tests (see in the appendix) are available and can be used in primary healthcare settings. The CAGE test Adapted to Include Drugs (CAGE-AID) or the longer The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) – developed by WHO for use in primary care – are suitable to detect hazardous, harmful and dependent use of psychoactive substances (Humeniuk and World Health Organization 2010).

Minimal intervention programs for brief smoking cessation (5A’s; see in the appendix) and alcohol use (Brief intervention For Hazardous and Harmful Drinking; see in the appendix) can be performed in primary care settings (Babor and Higgins-Biddle 2001). Referral to specialised smoking cessation programs (behavioural interventions alone or combined with pharmacotherapy) or, in the case of identified alcohol dependence or substance use disorder, referral for in-depth assessment and possible specialised treatment should be the next step.

4.2.1.c) LGBTI-specific interventions

There is an increasing number of intervention programs aimed specifically at the sexual minority population that have proved to be effective. They are typically developed in English-speaking countries, such as the US or Australia, but can be translated to other languages and adapted to different settings. In the following, there are examples of such good practises such as smoking cessation, substance and alcohol use interventions or weight management programs.

Recognising the specific needs of LGBTI smokers, smoking cessation and prevention interventions have been developed with and for this population, mostly in the US, Canada and Australia, in forms of group cessation counselling, social marketing campaigns or smartphone applications. These interventions, using specific components such as meeting in LGBTI spaces, LGBTI facilitators, and discussion of LGBTI specific smoking triggers were found to be more effective for LGBTI smokers than the interventions designed for the general population (Berger and Mooney-Somers 2016). Cessation programs using behaviour change techniques, such as “The Last Drag”, a community-based group smoking cessation (Eliason et al. 2012) or the “Put It Out Project (POP)”, an online (Facebook-based) intervention for young LGBTI smokers (Vogel et al. 2020) proved to be effective for their target groups.

Other LGBTI-specific interventions based on social competency skill-building strategy and minority stress theory have also provided promising results. An online intervention program, aimed at substance use among sexual minority youth, is focused on techniques for identifying and managing stress, making decisions and teaching drug refusal skills (Schwinn et al. 2015). Other programs, such as the cessation program for co-occurring substance and alcohol use for young sexual minority tobacco users from lower socioeconomic backgrounds are aimed at and tailored to particular needs of specific populations (O’Cleirigh et al. 2018).

Another interesting example is an intervention program for sexual minority women with weight problems. It uses elements of exercise, social support, and education on nutrition and physical activity and seems to be effective for addressing weight- and fitness-related health disparities among sexual minority women. The program design encourages a sense of community, a focus on achieving health and physical fitness rather than thinness, and a recognition of the specific stressors experienced by lesbian and bisexual women (Fogel et al. 2016).

4.2.2) Oncology

There is an assumption that some cancer types may be associated with sexual or gender minority status. The higher rates of specific risk factors characterising LGBT populations (e.g., smoking, alcohol consumption, obesity, or HPV infection) indicate that certain types of cancers may disproportionately affect LGBTI people. Scientific literature has identified specific cancer sites – anal, breast, cervical, colorectal, endometrial, and prostate – that require special attention from healthcare providers (Quinn et al. 2015). Epidemiological findings, prevention possibilities and clinical implications for each cancer site are collected below.

4.2.2.a) Anal cancer

Neoplasms of the anal canal and perianal skin are rare types of cancer that affect men who have sex with men (MSM) disproportionately. Human papillomavirus (HPV), an established human carcinogen, is a causal risk factor in the development of anal cancer. HPV is a sexually transmitted infection, transmitted through contact with bodily fluids, anogenital skin or mucous membranes, and can be passed through sexual intercourse and oral sex. In case of anal sex, the HPV infection can lead to anal intraepithelial neoplasia (AIN) and result in HPV associated

anal cancer. Anal cancers are rare, and some MSM are at increased risk of this cancer type (Daling et al. 2004). Factors associated with this elevated risk are high number of lifetime sexual partners, coexistence of other sexually transmitted infections, cigarette smoking and immunosuppression. HIV-positive men are at the greatest risk of developing anal cancer.

The cancer precursor high-grade AIN is very common in MSM, especially those living with HIV, and while the rates of progression to cancer seem to be lower than they are for cervical pre-cancerous lesions in women, screening for anal intraepithelial neoplasia (AIN) may be considered (Machalek et al. 2012).

Prevention:

Consistent external condom use is recommended as an effective preventive measure to reduce the risk of transmitting both HIV and HPV.

The HPV vaccine may be used for the prevention of anal HPV-related disease, as it reduces the risk of both anal cancer and anal condyloma. In a placebo-controlled, double-blind study quadrivalent HPV vaccine reduced the rates of anal intraepithelial neoplasia (Palefsky et al. 2011).

4.2.2.b) Breast cancer

Aside from cancers of the skin, breast cancer is the most frequently diagnosed cancer in women. Lesbians have more risk factors for breast and reproductive cancers: fewer pregnancies, shorter cumulative time of being pregnant and breastfeeding in addition to alcohol use, smoking, and obesity (Zaritsky and Dibble 2010). A number of smaller studies have identified higher rates of breast cancer among sexual minority women; however, a review found these small and of poor methodological quality and concluded that there are insufficient data to establish whether breast cancer is more prevalent among sexual minority

women (Meads and Moore 2013). Researchers have tried to estimate the prevalence of cancers among sexual minorities using other approaches. An ecological study – using county-level sexual orientation data – found positive association between the greater population density of lesbian women and higher incidence of breast cancer (Boehmer, Miao, Maxwell, et al. 2014).

Despite limited published data, the higher prevalence of risk factors suggests a higher risk for breast cancer in this population. This fact combined with a lower tendency of attending screening programs (Zaritsky and Dibble 2010) indicates the importance of promoting screening among sexual minority women. Healthcare providers should advise women to participate in breast cancer screening according to national recommendations. According to national screening recommendations, in Hungary every woman between 45-65 years of age should receive mammography every two years.

Breast cancer in the trans population

Breast cancer may be a matter of concern for trans persons, too. Trans patients receiving oestrogen therapy are subject to its potentially carcinogenic effects on breast tissue. The cumulative risk is lower than that of cisgender women, but it is a factor a provider must be aware of. Breast implants may constitute an additional difficulty for screening and diagnosis. Trans individuals who have remaining breast tissue should follow the same guidelines as cisgender women as to breast cancer screening. If mammography is not possible technically, ultrasound and MRI can be used in the case of detected palpable lesions. (Puechl et al. 2019).

4.2.2.c) Cervical Cancer

Cervical cancer is the fourth most common cancer in women despite the fact that there are effective primary (vaccination) and secondary

prevention possibilities (screening) that could prevent the majority of cases. Sexual minority women may be at increased risk. A systematic review found that compared to their heterosexual counterparts, bisexual women have higher rates of cervical cancer (Robinson et al. 2017).

The most important risk factor for cervical cancer is human papillomavirus infection (HPV). The infection, transmitted through sexual contact, is the causal factor of cervical dysplasia and neoplasia, consequently leading to cervical cancer. HPV infection – despite the widespread assumption – is not uncommon among sexual minority women. In a recent study more than a half of sexual minority women were infected with HPV, and about 37% were infected with a high-risk HPV type (Branstetter, McRee, and Reiter 2017). Other risk factors that may contribute to cervical cancers such as higher BMI scores and smoking are more prevalent among sexual minority women.

HPV vaccination is an effective preventive measure that protects against the high-risk HPV strains, subsequently preventing development of cervical cancer. Another effective tool for prevention of HPV transmission is the use of condoms or other latex barriers that can reduce the risk of sexually transmitted infections.

Regular screening is important for sexual minority women and the smear test (Pap-test) should be offered to lesbian and bisexual women between 25-65 every three years.

Cervical cancer in trans patients

The majority of trans men have a cervix present for a substantial portion of their life, and as the HPV burden is disproportionately high in the trans community, they may be at an increased risk for HPV-associated dysplasia and cancers. It is recommended that trans men have regular screening according to guidelines. The actual screening should be performed carefully in a

way that minimises the experienced trauma of the process that is usually unsettling (Puechl et al. 2019).

4.2.2.d) Colon and Rectal Cancer

Similarly to breast cancer, there is no clear evidence if sexual and gender minority population is at greater risk for colorectal cancer, but there are certain risk factors (obesity, smoking and alcohol consumption) present as well as smaller studies that have found a positive association between sexual minority status and colorectal cancer incidence (Boehmer, Ozonoff, et al. 2011). Healthcare providers should recommend their LGBTI patients participation in colorectal screening programs in accordance with the guidelines. In Hungary, a two-step colorectal cancer screening is available for everyone between age 50 and 70. It consists of a faecal occult blood testing (FOBT) and colonoscopy in case of a positive faecal blood test.

4.2.2.e) Prostate Cancer

Prostate cancer in gay and bisexual men is not a well-researched topic. There is limited amount of data on the epidemiology and the results from different studies are contradictory (Simon Rosser et al. 2016). Nevertheless, risk factors, such as smoking, are known to be more prevalent and prostate cancer is one of the most frequently diagnosed cancer types in men, healthcare providers therefore should be aware of its possibility.

In Hungary there is no organised populational screening for prostate cancer. Prostate-specific antigen (PSA)-based screening was found to be not specific enough (elevated PSA levels are present in other conditions, such as benign prostatic hypertrophy and prostatitis). Even when detecting the presence of cancer, there is no precise way to determine whether it would have ever caused symptoms during a man's lifetime, while

unnecessary treatment can lead to side effects such as incontinence and impotence.

Decision of screening by digital rectal exam (DRE) or by PSA for an asymptomatic patient should be deliberated individually for every patient and they should have the opportunity to discuss the potential benefits and risks of screening.

Trans individuals who do not undergo prostatectomy during their surgical transition may be at risk of prostate cancer. As an effect of the androgen-deprivation treatment the prostate becomes atrophic but there remains potential for the development of prostate cancer, especially among those starting hormonal therapy after age 50. The provider should discuss the screening options (prostate-specific antigen (PSA) testing and digital palpation of the prostate) with the patient. Palpation of the prostate can be performed by DRE or – if a neovagina has been created – by transvaginal palpation (Unger 2014). When palpated transvaginally, the prostate is located anterior to the neovaginal wall and should be small or nonpalpable.

4.2.2.f) Endometrial Cancer

In the absence of published literature, it is not known whether lesbian and bisexual women have an increased prevalence of endometrial cancer compared to heterosexual women. The risk can be higher among sexual minority women because of their significantly higher prevalence of nulliparity and lower use of oral contraceptive pills (Zaritsky and Dibble 2010). In addition, sexual minority women tend to have higher body mass indices (BMI) which is a separate risk factor for endometrial cancer.

Endometrial Cancer in trans patients

For transgender men with uterus and ovaries in situ, there is no need for routine screening if they are asymptomatic. For symptomatic pa-

tients, pelvic ultrasound or CT scan are the first line diagnostic tools (Puechl et al. 2019).

4.2.2.g) HIV associated cancers

Modern, effective antiretroviral therapy has dramatically changed HIV-associated morbidity and mortality and has significantly improved the life quality of HIV-positive individuals. Not every HIV-positive person receives ART, however, therefore certain cancers that are now known to be associated with HIV infection may still occur in this population. Studies found an increased incidence of Non-Hodgkin's lymphoma, Kaposi's sarcoma, cervical cancer, lung cancer, Hepatocellular carcinoma, Hodgkin's lymphoma, oral cavity and pharyngeal cancers among patients with HIV infection (Yarchoan and Uldrick 2018; Silverberg et al. 2015; Engels et al. 2008). HIV-positive sexual and gender minority patients who are not receiving effective ART because they are unaware of their seropositivity, or who do not adhere to the therapy, may be at increased risk of these cancer types.

4.2.3) Psychiatry

When discussing the question of mental health in the LGBTI population, it is important to state that being a member of a sexual or gender minority group in itself does not mean increased vulnerability to mental disorders. The majority of LGBTI people are mentally healthy, resilient to stress and live well-adjusted lives. Being a sexual or gender minority, however, still means facing higher mental health risks than heterosexual and cisgender people do. The repeated exposure to stigmatisation, social exclusion, discrimination and harassment lead to stress that only minority people experience, and this disproportionate strain leads to increased risk of various mental health problems in minority populations. Healthcare professionals should be

aware of specific mental health risks affecting LGBTI persons because of their minority status. A good understanding of these problems is the foundation for providing inclusive mental healthcare for LGBTI people.

4.2.3.a) Depression, anxiety, and psychological distress

The increased prevalence and incidence of mental health conditions among sexual and gender minorities is a well-researched topic. Chapter 2.1 (Mental health) gives a detailed overview of the psychiatric conditions in LGBTI populations, therefore below is just a short summary of the epidemiology.

LGBTI people are more likely to suffer from affective disorders, such as depression, bipolar disorder, dysthymia and also anxiety and social phobia disorders. (Wu et al. 2018; Semlyen et al. 2016; Sandfort et al. 2014). They are also at higher risk of alcohol misuse and substance dependence (Gonzales et al. 2016). Studies examining the risks of LGBTI subgroups separately have discovered significant differences, indicating specific risk-factors and different vulnerability to mental health problems. Bisexual men seem to be at especially high at risk of poor mental health compared even to gay men (Caceres et al. 2018). Trans individuals also are at high risk (Dragon et al. 2017), especially trans youth (Grossman and D’Augelli 2007).

The causation of depression and anxiety disorder is multifactorial. Genetic, environmental and psychological factors play a role in the aetiology, continuation, and consequences of mood disorders. Intrinsic – endocrinological and biological – and extrinsic factors – environmental stressors – can trigger or exacerbate mental health problems.

Negative experiences such as stigma, prejudice, discrimination, abuse, violence, isolation and

exclusion, along with the constant expectation and fear that these may happen again any time, may cause a severe impact on mental wellbeing of LGBTI people. Alongside predisposing risk factors, this chronic stress can result in a heightened vulnerability to mental health issues such as depression and anxiety.

Risk factors that contribute to development of anxiety and mood disorders are present more often in LGBTI population. They are more frequently exposed to violence and victimisation (Andersen and Blosnich 2013) and are more likely to use alcohol and other substances (King et al. 2008a). Stressors such as victimisation, employment discrimination, harassment at school and family rejection affect sexual and gender minorities more often (Bränström 2017).

LGBTI people experience stress associated with society’s stigmatisation of their sexual or gender identity. Growing up in such a society often leads to this stigma being internalised, such that sexual minorities also victimise themselves by possessing negative attitudes toward their sexual or gender identity (internalised homo/bi/trans/interphobia).

Recommendation for providers

It is important to appreciate that LGBTI people’s greater risk originates not intrinsically from being a sexual or gender minority, but from the response and reaction they receive from their surroundings. By now, many studies have proved that an accepting family and supportive environment decreases the health disparities threatening the LGBTI youth (Detrie and Lease 2007; Doty et al. 2010; Needham and Austin 2010). Providers should be aware of specific mental health and wellbeing problems that affect LGBTI persons disproportionately because of their minority status. A good understanding of these issues is the foundation for providing an inclusive healthcare service for LGBTI people.

Screening for depression and mental health in primary care settings includes exploring the patient’s health history (like hospitalisation for issues such as clinical depression, or previous prescription of psychoactive drugs) and family history of mental illness (as depression and bipolar disorders have hereditary components). Current status can be ascertained by using simple screening tools like Beck’s Depression Inventory or the Patient Health Questionnaire-2 (PHQ-2), which includes the first two items of the PHQ-9. If depressed mood and anhedonia are detected, the patient needs to be further evaluated to determine whether they meet the criteria for a depressive disorder. The State Trait Anxiety Inventory or the Hamilton Anxiety Rating Scale can be used for measuring anxiety.

It adds to the problem that many avoid seeking mental healthcare because of mistrust in the psychiatric profession and its practitioners or a fear of discrimination or homo- or transphobia. To counterbalance this fear, it is important to provide an inclusive clinical environment, where sexual and gender minority clients feel safe and welcome and where they can discuss their mental distress with skilled and affirming healthcare staff.

People experiencing depression, anxiety, or other mental health problems are in need of LGBTI-sensitive support groups and mental health counselling. Peer support groups, working together with the hospital, can be helpful for intersex people. The availability of such treatment, however, is still limited and LGBTI individuals often face providers and other patients who are ignorant about their needs or unwelcoming and antipathetic towards them. This kind of therapy atmosphere only adds to the stress LGBTI people face.

LGBTI-specific interventions

Addressing LGBTI mental health needs, specific intervention programs have been developed

and more are under development, tailored to the specific needs of sexual and gender minorities. They use specific components such as meeting in LGBTI spaces, engaging LGBTI facilitators and addressing specific problems. These interventions – developed mostly in the US – are sadly not yet available in Hungary. Different intervention approaches exist, with different delivery modes. There are some examples below of those that have proved successful in improving mental health for sexual and gender minority people. Hopefully, as more data become available, more specialised programs, adjusted to the specific needs of different sub-populations (such as transgender people or older sexual minority people) will be developed.

ESTEEM (Effective Skills to Empower Effective Men), a 10-session skills-building intervention for improving mental health for gay and bisexual men, is designed to reduce young gay and bisexual men’s co-occurring health risks. It is an individually delivered CBT intervention with efficacy for reducing stress-sensitive mental health disorders (e.g., depression, anxiety) by enhancing emotion regulation skills; reducing avoidance patterns; and improving motivation and self-efficacy for behaviour (Pachankis et al. 2019).

Rainbow SPARX is a computerised cognitive behavioural therapy (CCBT) program, in the form of an online game, aimed at reducing depressive symptoms for sexual minority youth.

It shows promising results and can be offered as a self-help resource that can be used without stigma in privacy or in addition to face-to-face therapy (Lucassen et al. 2015).

4.2.3.b) Suicide and self-harm

It is difficult to estimate the incidence of suicide among LGBTI people (as sexual orientation is not recorded in death certificates); epidemiological

studies, however, report elevated rates of suicidal behaviours and suicidal ideation among sexual or gender minorities (King et al. 2008b).

Sexual minority participants are at a greater risk of suicidality, and the risk is the highest for gay men and bisexual women. Gay men are about four times more likely to have attempted suicide and bisexual women are over six times more likely to have attempted suicide and almost 21 times more likely to have engaged in non-suicidal self-injury (Swannell, Martin, and Page 2016). Similarly high rates of suicidal ideation and suicide attempt were found among transgender individuals (Effrig, Bieschke, and Locke 2011). Non-suicidal self-injury (NSSI) is similarly prevalent among LGBTI individuals, and transgender and bisexual individuals are at the greatest risk (Liu et al. 2019).

There are various risk factors associated with suicidal behaviours among sexual and gender minority people: the presence of mental health conditions, substance abuse and victimisation. Exposure to physical and sexual abuse, homelessness, and intimate partner violence contributes to suicidality (McLaughlin et al. 2012). Discrimination is associated with higher prevalence of suicidal behaviours, mediated by internalised homo-, bi- and transphobia that leads to shame, hostility, and self-hatred (McDermott, Hughes, and Rawlings 2018; Puckett et al. 2017). Parental rejection was also associated with poorer mental health outcomes and more suicide attempts (Ryan et al. 2009).

Healthcare providers should be aware of this increased risk and screen for suicidal thoughts and behaviours in the LGBTI population. It is also recommended to train staff members to recognise and respond to warning signs for suicide and learn to recognise the risk and protective factors for suicidal behaviour in sexual and gender minority people. A number of suicide risk assessment questionnaires are available, but it is important that suicidal ideation should always

be taken seriously, especially when the patients have specific plans for taking their own life (Ghasemi, Shaghaghi, and Allahverdipour 2015).

4.2.3.c) Substance use, alcohol misuse and smoking

Alcohol and substance misuse constitutes a problem for a significant part of the sexual and gender minority population. There are complex connections between external stressful events, internalisation of negative societal attitudes and health destructive coping strategies that make sexual and gender minority people more at risk of addictions.

Compared with heterosexual people, LGBTI people have a higher prevalence of alcohol consumption (Cunningham 2016; Gonzales 2016). Sexual minority women are at particularly high risk of alcohol and substance use (McCabe 2009), especially bisexual women (Schuler 2019)

There are heterogeneous factors contributing to more prevalent substance use in the LGBTI population. Substance use as a maladaptive coping strategy in difficult life circumstances or as self-medication in stressful situations is a known phenomenon and can explain the higher levels of addiction in populations exposed to higher levels of stress.

In addition to this, LGBTI-friendly bars and nightclubs have been the scene of social life for many LGBTI people, making alcohol consumption and drug use a routine part of social encounters. This, to some extent, has normalised recreational drug use and excessive drinking in the community and on the one hand positions LGBTI persons in an elevated risk of exposure to potentially addictive drugs, on the other hand can impede the recovery from addiction.

An additional contributing factor is that – as a result of mistrust in health professionals and

barriers in accessing healthcare services – LGBTI people are less likely to seek professional help. These circumstances combined lead to a greater risk of addiction among sexual and gender minority groups.

The patterns change with age – alcohol and other substance use is the highest in early adulthood and both the quantity and frequency of use decrease with age.

There are known physical, mental, and social consequences associated with long-term alcohol and substance abuse. The use of alcohol or drugs when engaging in sex is associated with a higher rate of unsafe sexual practices and leads to a higher risk of sexually transmitted infections. Drinking and drug use are associated to exposure to victimisation – such as physical and sexual abuse, homelessness, and intimate partner violence – among LGBTI people (McLaughlin 2012, Drabble 2013).

Tobacco use and cigarette smoking is also a significant problem among the sexual and gender minority population, constituting – and contributing to – a significant health problem. Smoking is significantly higher among LGBTI people than in the general population (38.5% vs. 25.3%) (King, Dube, and Tynan 2012), and also there are significant differences between different subgroups, bisexual women being in at the most elevated risk for tobacco use (Emory et al. 2016).

There are heterogeneous factors contributing to higher smoking rates within the LGBTI population. Smoking as a maladaptive coping mechanism in stressful life situations can be a reaction to the psychological distress experienced by members of a marginalised minority group. Frequenting bars and nightclubs where smoking is more normative may amplify the exposure. There is also evidence of the tobacco industry marketing directly to lesbian, gay, bisexual, and transgender (LGBT) populations (Stevens, Carlson, and Hinman 2004; Dilley et al. 2008).

Studies describe a relationship between minority stress and increased health risk behaviours, including smoking. Discrimination and victimisation have been found to be associated with tobacco use. Less comfort with one’s sexual identity (higher levels of internalised homophobia) was also associated with smoking intensity (Andersen and Blosnich 2013). Other substance use, depression, and low socioeconomic status also correlated with higher smoking rates in the LGBTI population (Bruce Baskerville et al. 2018).

The use of alcohol, tobacco and other substances is often a part of the cluster among sexual and gender minorities. The syndemic theory – synergistic interaction of coexistent risk factors or health determinants resulting in excess burden of disease (Singer and Clair 2003) – is frequently cited in literature researching the causes of LGBTI health disparities (Coulter et al. 2015; Parsons et al. 2012; Mustanski et al. 2007).

In the LGBTI population, an array of risk factors intertwines with complex social problems leading to disproportionate burdens of disease. Minority stress and societal discrimination lead to internalised stigma, low self-esteem, depression, substance use and risky sexual behaviours. This in turn is connected to an increased risk of STIs – most notably HIV – that can bring additional stigma from society and self-hatred from LGBTI people themselves, leading to further self-destructive behaviours. The cumulative effect increases the extent of negative health consequences.

On the population level this implies that it is not enough to focus only on the separate components of the syndemic, but all contributing factors should be addressed in order to reduce the health disparities in the sexual and gender minority population. For a provider, it is important to consider how the different syndemic factors, such as depression, internalised homophobia, childhood abuse and discrimination reinforce one another and make battling with addiction a

challenging task for sexual and gender minority patients.

4.2.3.d) Body image concerns and eating disorders

Eating disorders are more common among LGBT adults and adolescents than their heterosexual and cisgender counterparts (Parker and Harriger 2020). This higher prevalence is attributable to the increased stress in sexual and gender minority populations. Disordered eating behaviours in sexual minorities are connected to stress-induced responses to victimisation, discrimination, and homophobia. Minority stress was found to be related to binge-eating in lesbian and bisexual women and body dissatisfaction in gay males (Parker and Harriger 2020).

The subgroup especially at risk are gay and bisexual adolescent boys and adult men, who have a greater prevalence of disordered eating behaviours (fasting, vomiting, or taking diet pills to lose weight) (Nagata, Ganson, and Austin 2020).

A possible explanation of this is that gay and bisexual men are more dissatisfied with their bodies, consequently more vulnerable to eating disorders. Gay and bisexual men may be more affected by social norms that guide cultural perception of beauty and feel more desire to be physically attractive and thin. Some suggest that values and norms in the gay male community focus increased attention on physical appearance, so many may feel pressured to conform to these beauty standards (Beren et al. 1996). Others claim that as gay and bisexual men aim to attract men, therefore they are subject to similar pressures and demands as heterosexual women, leading to a greater risk of body dissatisfaction (Siever 1994).

Bisexual women are also at a higher risk of eating disorders. They have been found to have higher

rates of disordered eating behaviours compared to lesbian and heterosexual women (Shearer et al. 2015) while research findings of the rates of eating disorders and disordered eating behaviours among lesbian women are rather inconsistent. Some of the studies suggest that they are at greater risk for disordered eating behaviours (Davids and Green 2011), especially binge eating (Austin et al. 2009); while others found no significant differences between lesbian and heterosexual women in regard to eating disorder prevalence (Feldman and Meyer 2007). In addition, lesbian women have been found to be less preoccupied with their own physical attractiveness, consequently less dissatisfied with their bodies and less likely to engage in disordered eating behaviours (Beren et al. 1996; Siever 1994).

Body image concerns (concern with weight and shape; desire for muscularity), and the use of anabolic steroids for muscle building are also more frequent among transgender people (Calzo et al. 2017; Diemer et al. 2015). It has been hypothesised that trans people may adopt disordered weight and shape control behaviours aspiring to acquire more masculine or feminine figures (Watson, Veale, and Saewyc 2017), or to reach such a low body weight that results in amenorrhea, which could be desirable for a trans man (Avila, Golden, and Aye 2019).

Eating disorders constitute a significant risk to physical health. Obsessive weight control or restrictive eating practises, such as purging, starving and diet pill use can lead to serious health consequences. Anabolic steroid use increases the risk of endocrine disorders, psychiatric symptoms, kidney, liver, musculoskeletal and cardiovascular diseases.

The greatest risk connected to eating disorders comes from the increased risk of suicide and people suffering from disordered eating have significantly elevated mortality rates. (Arcelus et al. 2011)

4.2.4.) Surgery

4.2.4.a) Introduction

Gender-affirming genital surgeries are surgical interventions that help align a person's genitals and/or internal reproductive organs with that person's gender identity, including: hysterectomy, salpingo-oophorectomy, orchiectomy, metoidioplasty, phalloplasty, vaginoplasty, and chest surgeries (NHS, 2019a).

Although surgeries are considered as one of the last medical steps of gender reassignment, and some trans or gender non-conforming individuals cannot achieve relief from distress, mental burden or suffering without them, in other cases trans and intersexual individuals can find comfort with their gender identity and sexual characteristics without undergoing any surgeries (NHS, 2020; WPATH – SOC7, 2012).

Trans activists highlight the pathologizing approach of trans care, and urge the de-medicalisation of trans identity. On the medical side, professionals argue that trans-related diagnoses as classifications can be useful for trans people to access gender affirming treatments. As in the case of some elective surgeries, trans people should have access to this type of intervention without a burdensome medical history and psychiatric diagnosis. Surgical and pharmaceutical/hormonal therapies that support the mental (and physical) well-being of transgender people should take place in a supportive, non-stigmatizing environment, with culturally competent professionals who provide accurate information for trans individuals in order to support them in making well-informed decisions. It is also important to provide a thorough description of the risks, short- and long-term (side) effects, and consequences of medical interventions and treatments for our trans patients, yet instead of the paternalistic medical model, within the framework of patient-centred care, respecting

their decision-making ability, agency and authority.

Yet the opportunities and requirements of gender-affirming surgeries and treatments differ from country to country (Castagnoli 2010). There are places where these operations are available for trans adults without any – psychiatric – diagnosis (e.g: in Denmark), while in other countries, diagnosed “Gender incongruence” – as an ICD diagnostic category – or compliance with other requirements are necessary (García and Ayuso-Mateos 2019; Hilden 2020; Kórász 2015).

In order to apply for gender and name change in Hungary, the Hungarian Ministry of Public Administration and Justice, Department of Registry used to require two (forensic) psychiatrists' independent and consistent opinion about the patient's transsexual diagnosis, and also a forensic psychologist's opinion. This practical rigour eased somewhat between 2008 and May 2020; trans adults could apply for gender marker/ name change with one psychiatrist's and one psychologist's opinion, and the medical opinion of a urology or gynaecology specialist. The purpose of a urological or gynaecological opinion was to rule out functional and anatomical abnormalities (e.g., genetic or hormonal disorders, intersex conditions) and to state that the gender reassignment surgery has no medical contraindications (Kórász, 2015). Since May 2020, it has not been possible to change the name and gender marker in documents at all, however – fortunately – this is not needed for operations or receiving medication.

There is no official or mandatory medical protocol for the examination and treatment of trans patients in Hungary. Most private services apply the recommendations of the World Professional Association for Transgender Health before surgery and hormone treatment, therefore the following part has been written according to the 7th edition of Standards of Care.

The following are usually required to perform any gender reassignment surgeries in Hungary:

1. Persistent, well-documented, diagnosed gender incongruence (consultation with a clinical psychologist);
2. Capacity to make a fully informed decision and to give consent for treatment;
3. Being of age;
4. Estimating any medical contraindications, investigating hormonal, genetic and anatomic status (if significant medical or mental health concerns are present, they must be reasonably well controlled).

In the case of **top surgeries** (breast augmentation, implants or lipofilling for transgender female, and chest reconstruction of trans men) these additional considerations are also important:

Hormone therapy is not requested in the case of chest reconstruction, and it is not an explicit criterion any more, but it is recommended that the patients undergo feminising hormone therapy (minimum 12 months) prior to breast augmentation surgery in aim of maximising breast growth, which ensures better surgical (aesthetic) results (WPATH – SOC7, 2012).

Top surgeries are significant because breasts and chest are very important and distinguishing sex characteristics. The presence, size, and shape of the breast or chest are substantial external features that may play an important role in gender presentation.

In case of the removal of **genitals** (Hysterectomy, Salpingo-Oophorectomy, Orchiectomy), the recommendation of two mental health professionals with competency is required according to the WPATH. Trans individuals are also recommended to receive continuous gender reassignment hormone therapy – unless hormones

are contraindicated – for at least 12 months. The aim of hormone therapy prior to gonadectomy is primarily to introduce a period of reversible oestrogen or testosterone suppression before the patient undergoes an irreversible surgical intervention. These criteria do not apply to patients who are having these surgical procedures for medical indications other than gender dysphoria (WPATH – SOC7, 2012).

In addition, before undergoing **gender reconstruction** surgeries (Metoidioplasty, Phalloplasty, Vaginoplasty), WPATH suggests that patients live full-time in a gender role that is congruent with their gender identity for 12 months in order to experience and socially adjust in their desired gender role. Although it is not a criteria for gender reassignment surgeries, if it is necessary for any other reasons, regular psychotherapy is recommended (with the aim of preparing patients for the consequences, difficulties and other mental health impacts of the received treatment and in order to facilitate positive coping and reduce the stress and anxiety associated with the intervention) (WPATH, – SOC7 2012).

It would be necessary to re-conceptualise our medical procedures in connection with gender reassignment in order to align them with a patient-centred approach and to better acknowledge and support the agency of our patients.

4.2.4.b) On the surgeries themselves:

Chest reconstruction

As previously stated, chest shape and breasts are important for trans individuals to present their gender in public and private life (Richards and Barrett, 2013; Selvaggi 2020), therefore chest reconstruction could be significant for trans patients in order to reflect their internal sense of

gender. Some trans people often bandage their breasts or use special breast binders⁶ even before surgery in order to achieve a stronger resemblance to a flat chest, but binders also have some unpleasant effects: namely, it is uncomfortable, it restricts breathing and compresses the ribcage and spine, so their long-lasting wear can be painful and harmful (Poudrier et al. 2019). Most trans patients choose to undergo chest surgery during gender reassignment, which has positive effects on their quality of life, including having a more comfortable and self-identical body shape with the relief of no longer using binders (Poudrier et al. 2019; Seamont 2018).

Several techniques exist for the flattening of breasts, including breast tissue reduction, skin removal, and nipple reposition. We need to ensure that our patients have the opportunity to choose the solution that works best for them with informed consent. We must also inform patients that chest reconstruction may have some general surgical complications such as bleeding, infection, scarring, necrosis, haematoma, and specific issues: asymmetry, contour deviation, nipple necrosis, or dissatisfaction with the results might also occur (Richards and Barrett 2013; Selvaggi 2020).

Hysterectomy, and salpingo-oophorectomy

In some cases, trans patients undergo the surgical removal of the uterus, including the removal of the cervix, ovaries, and fallopian tubes. A trans-abdominal, laparoscopic technique or transvaginal operations are also available with different indications and contraindications. Hysterectomy is usually required before other surgeries (such as vaginectomy, scrotoplasty, and phalloplasty), but the option of preserving ovaries is available for patients, and it might be useful to maintain bone density.



6 Binders are clothes or tools made of fabric which help to compress or minimise chest tissue in order to create the appearance of a flatter chest. People use commercial binders, sports bras, strategic layering and bandages or elastic materials for this purpose. It has some adverse health effects, though.

Metoidioplasty

Metoidioplasty refers to the construction of a microphallid by using testosterone-enlarged clitoral tissue and performing urethroplasty in a less complicated surgical procedure than phalloplasty. In the case of metoidioplasty, the capacity for standing urination is sometimes inadequate. As a positive outcome, the clitoral tissue retains its erectile function and erogenous sensation, but the penis is usually too short for penetration during sex (Petrovic and Djordjevic 2003).

Phalloplasty

The aim of phalloplasty is to reconstruct a penis which is suitable in its appearance and functional, therefore enabling the patient to have sexual intercourse and urinate like a cis man. In some cases, aesthetic surgeries are also available; in the aim of reducing complications or surgical risk, this surgery only includes the creation of the penile body (without the repositioning of the urethra).

The first step of phalloplasty is vaginectomy, removing the mucosal lining of the vaginal cavity, then surgeons perform pelvic reconstruction in order to prevent the formation of rectocele or cystocele (Weyers et al. 2010). The next step is the phallic reconstruction: the creation of the penile body with the urethra by using a radial forearm flap. In order to create a functional penis, and to maintain erogenous and skin sensation, forearm nerves are anastomosed with the ilioinguinal nerve and the dorsal clitoral nerves and some clitoris tissue is preserved and placed on the penis. After tactile sensitivity is recovered, the erection prosthesis can be safely inserted.

Necrosis, haematoma, scarring, fistulas, or urinary tract stenosis may occur as occasional complications after phalloplasty.

Scrotoplasty

The creation of a scrotum is usually required by the patients for the better appearance of the external genitals. It can be made by using the labia majora, split-thickness skin grafts, full-thickness skin grafts or the genital skin, with or without testicular implants (Lucas et al. 2017).

Breast augmentation

The breast augmentation or chest reconstruction procedure is almost the same for trans people as it is for cis women (e.g., after breast tumour induced mastectomy), but due to the anatomical differences in the flat chest shape and nipples, there are some important considerations: many people with a flat chest have a wider bust, and their nipple areas may be more oval than breast- ed ones, and they are placed more laterally on the chest (Fakin and Lorenzini 2020). The most common techniques of breast augmentation are lipofilling, or breast prosthesis implanta- tion with an implant of the right size, which has the most natural sight. During surgery we have the opportunity to visually modify the place of the nipple area with choosing the right place for the implant. Detailed information on breast surgery procedures and outcomes can be read in an article by Miller and colleagues (Miller et al. 2019). These interventions should be considered as quality-of-life operations and not simply cosmetic procedures: trans individuals’ body image, self-perceived health (which is one of the most important health indicators), mental well-being and quality of life significantly improve due to gender affirming surgery (Jellestad et al. 2018; Lindqvist et al. 2017; van de Grift et al. 2016; Man- ieri et al. 2014). Side effects or complications such as haematoma, infections, asymmetry, scarring, and capsular fibrosis are rare during augmenta- tion and correlate with preoperative hormonal

therapy, BMI and implant size (Miller et al. 2019; Fakin and Lorenzini 2020).

Orchiectomy

During orchiectomy the testicles are removed. In some cases, the scrotal skin is left behind to cre- ate labia or to line part of the neo-vagina. Usually orchiectomy is recommended in the same pro- cedure along with penectomy and vaginoplasty.

Penectomy

The removal of the penis is usually done along with vaginoplasty. During penectomy a new urethral opening is created, and the urethra is shortened and repositioned.

Vaginoplasty

Vaginoplasty or creation of a neo-vagina is usu- ally done as one step along with orchiectomy and penectomy, partially preserving penile tis- sues. During vaginoplasty a new vagina, clitoris, and labia are created (Pariser and Kim, 2019). Preserving sexual sensation and the creation of a functional vagina are important in case of vaginoplasty in order to maintain the ability to orgasm and the opportunity of a pleasurable sex- ual life (Selvaggi et al. 2007). Penile inversion is the most general procedure for creating a vagina. During the procedure the penis is skinned – deep enough to separate Dartos’ fascia – and the skin is turned inside out to line the vagina, the cylin- der of penile shaft skin remaining intact (Weyers et al. 2010). Some cases – e.g., for patients who have undergone circumcision – the skin of the lower abdomen or the scrotum is used to create a proper size for the vagina.

Vaginoplasty might also have unique conse- quences – beyond general surgical complications – like necrosis of the vagina and labia, vesico- vaginal, urethrovaginal, colonovaginal or rec- tovaginal fistulas, stenosis of the urethra, and insufficient size of the vagina for coitus. In order

to preserve the proper size of the vagina for pene- tration and prevent vaginal stenosis, continuous dilation is necessary.

Clitoroplasty and **labiaplasty** usually take place at the same time as vaginoplasty. Labia mino- ra are usually made from the skin of the penis, while labia majora are made from the scrotal skin. In order to create a functional clitoris, during penectomy most of the glans penis tissue is preserved and the pudendal nerve is handled carefully. The distal mucosal collar skin of the glans will become the clitoral hood. In some cas- es later surgeries are needed in order to achieve better aesthetics.

As an alternative to vaginoplasty there are other surgical options such as zero depth vaginoplasty or **vulvoplasty**. This procedure only includes the creation of the vulva – with the clitoris, labia majora, labia minora and the repositioned ure- thral opening – without creating a vaginal canal (Garcia 2018; Jiang et al. 2018).

Other surgeries

Facial and neck surgeries or other aesthetic procedures can also be done in order to adapt one’s appearance to their gender identification. For trans women, the most common procedures are the reduction of thyroid chondroplasty or prominent Adam’s apple, a forehead hair im- plant or reconstruction, chin and jaw surgeries, rhinoplasty, zygomaticus reduction, and suc- tion-assisted lipoplasty of the waist for contour modelling. Meanwhile, trans men can undergo an Adam’s apple implant, chin and jaw reshaping, forehead contouring and rhinoplasty.

4.2.5.) Pharmacology

The criteria for Hormone Therapy are the same as for the surgical procedures in Hungary:

1. Persistent, well-documented gender incon- gruence;
2. Capacity to make a fully informed decision and to give consent for treatment;
3. Being of age (over 18);
4. Estimating any medical contraindications, investigating hormonal, genetic and ana- tomic status (if significant medical or mental health concerns are present, they must be reasonably well controlled).

In WHO’s and WPATH’s view, a recommenda- tion for hormone therapy should be given by a mental health professional with appropriate cultural competency. The organisations above also suggest that trans people should undergo psychotherapy before treatment (the duration is defined by the mental health professional, usually 3 months) or they should live full-time according to their preferred gender for at least 12 months in the aim of gaining “life experi- ence”. However, according to a patient-centred approach, therefore respecting the patient’s will and agency, psychological counselling is only recommended if the patient requests it after they have been provided detailed and adequate infor- mation on the treatment itself and its benefits and side-effects.

Patients should have adequate knowledge on the effects and side effects of hormone therapy and the prognosis of treatment in order to be able to provide informed consent.

4.2.5.a) Hormone therapy options for transgender women (male to female, MTF)

Oestrogen has a major effect on the physical and emotional characteristics of women. It can be applied per os, by injection or topically (gel, spray or patch).

Testosterone blockers or anti-androgens are medications or hormones which antagonise or

block testosterone. The most common is spironolactone, which reduces the production of and inhibits the action of testosterone. Because spironolactone has an effect on water balance, it is important to draw the patient’s attention to fluid intake and to staying hydrated and if necessary, the patients’ potassium level should be monitored. The most common side effects of spironolactone are: excessive urinating, dizziness, lightheadedness.

Gonadotropin-releasing hormone (GnRH) analogs (e.g., leuprolide) are also available as testosterone blockers, if the patient cannot tolerate spironolactone. GnRH analogs are very expensive, but patients usually tolerate them well. They can be applied in injections, or as a nasal spray.

Finasteride and **dutasteride** can be used if spironolactone or GnRH analogs are contraindicated.

Progesterone can also be used as a partial testosterone blocker if other medications cannot be used or have proved to be ineffective. As a common side effect, anxiety, depression, irritability, weight gain and high blood cholesterol might occur.

Recommended doses of hormone therapy:

1. *Anti-androgen treatments:*
 - Spironolactone, 100 – 200 mg/day (up to 400 mg)
 - Cyproterone acetate, 50–100mg/day
 - GnRH agonists, 3.75 mg sub-cutaneous monthly
2. *Oral oestrogen:*
 - Oral conjugated estrogens, 2.5–7.5mg/day
 - Oral 17-beta estradiol, 2–6mg/day
3. *Parenteral oestrogen:*
 - Estradiol valerate, 5–20mg i.m./2 weeks or cypionate 2–10mg i.m./week
4. *Transdermal oestrogen:*
 - Estradiol patch, 0.1–0.4mg/2X week

Surveillance recommendations for transgender women (MtF) on hormone therapy:

- Monitor patients every 3 months for the first year and then every 6 – 12 months.
- Regularly monitor serum testosterone and oestradiol (testosterone 30 – 100 ng/dl; oestradiol 100-200 pg/ml).
- Monitor prolactin and triglycerides before starting hormones and at follow-up visits.
- Monitor potassium levels if the patient is taking spironolactone.
- Bone mineral density screening is recommended before starting hormones for patients at risk for osteoporosis. Routine screening after age 60, or earlier if sex hormone levels are consistently low.
- Regular breast and prostate screening is recommended for MTF patients.
- Monitoring liver functions every 6-12 months.

(Tomlins 2019; WPATH – SOC7 2012; Gardner and Safer 2013; Unger 2016; Weyers et al. 2010; Gooren and Morgentaler 2014; NHS 2019b)

Hormone therapy options for transgender men (female to male, FTM)

Testosterone treatment is usually applied by (subcutan or intramuscular) injections, but it is available in the form of pills, topical treatments (gel or patch), under the skin depos/pellets. Testosterone might provoke high blood pressure, irritability, bloating or pelvic cramping. High levels of testosterone can result in high oestrogen levels and might provoke menstruation.

Progestagens can be used as adjunctive therapy after testosterone levels have been optimised, in order to repress menstruation. Progestagens also provoke mood disorders, fatigue and sedation, acne and might adversely affect bone mineralisation.

1. *Orally*
 - Testosterone undecanoate, 160–240mg/day
2. *Parenterally (intramuscular or subcutaneous)*
 - Testosterone enanthate or cypionate, 50–200mg/week or 100–200mg/2 weeks
 - Testosterone undecanoate, 1000 mg/12 weeks
3. *Transdermally*
 - Testosterone 1% gel, 2.5 – 10 g/day
 - Testosterone patch, 2.5 – 7.5 mg/day

Surveillance recommendations for transgender men (FTM) on hormone therapy:

- Monitor patients every 3 months for the first year and then every 6 – 12 months.
- Monitor serum testosterone at follow-up visits with a practical target in the male range (300 – 1000 ng/dl). Peak levels of parenteral testosterone can be measured 24 – 48 h after injection.
- Monitor haematocrit and lipid profile before starting hormones and at follow-up visits.
- Monitor serum oestradiol during the first 6 months and thereafter until uterine bleeding has ceased.
- A bone mineral density screening is recommended before starting hormones for patients at risk for osteoporosis. Routine screening after age 60, or earlier if sex hormone levels are consistently low, is advisable/recommended.
- Regular screenings of FTM patients with cervixes or breasts is recommended.
- Monitoring liver functions every 6-12 months.

(Tomlins 2019; WPATH – SOC7 2012; Carswell and Roberts 2017; Gardner and Safer 2013; Unger 2016; Weyers et al. 2010; NHS 2019b)

4.2.5.b) Puberty blockers

For trans children who have reached Tanner stage two or three, **GnRH analogues** are avail-

able for delaying the development of secondary sex characteristics, and reversibly and temporarily suspend puberty. GnRh analogues inhibit the secretion activity of the pituitary gland, therefore temporarily suppress the secretion of sexual hormones (oestrogen and testosterone). These hormones are sometimes called ‘blockers’, because they prevent the further development of primary and secondary sex characteristics. For adolescents assigned male at birth, GnRH analogs reduce the growth of facial and body hair, limit voice deepening and the growth of external genitalia (penis and testicles). In the case of youth assigned female at birth, the treatment delays menarche or provokes menorrhoea, and limits the growth of breasts. Pubertal development, the experienced changes in their body can cause significant distress for non-cisgender youth. The suicide rate of transgender youth is very high, and it is even higher for those who have been denied the option of puberty blockers. Puberty blockers can improve well-being and reduce depression, anxiety and risk for self-harm or suicide in trans children (Cohen-Kettenis, Delemarre-van de Waal and Gooren, 2008).

For receiving puberty blockers in those countries where the treatment is available, patients should express long-lasting and intense gender-nonconformity or gender dysphoria, which worsens with puberty. (For detailed information on criteria suggested by WPATH **see Chapter 5. – Special issues**)

Puberty blocker therapy usually begins at the age of 12-13 and medication can be maintained for 2-3 years. When the child has reached the age of medical consent, they have the opportunity for further interventions. GnRH analogue treatments are given as depot injections (monthly or every three months), or as an under-skin pellet or implant (implants need to be changed yearly). Children who receive puberty blocker therapy should be monitored regularly (for effectiveness and side effects; e.g., body height and bone density). The side effects of puberty

blockers include short term symptoms: swelling, weight gain, hot flashes, headaches, and might also have long-term effects on bone density and fertility (WPATH – SOC7, 2012; Cohen-Kettenis, Delemarre-van de Waal and Gooren, 2008).

There are a number of arguments and counter-arguments within the medical community regarding puberty blocking therapy and the intervention is only available in a few countries (Giovanardi 2017).

4.2.5.c) Hormone replacement therapy for intersex people

Hormone therapy of intersex individuals may include mineralocorticoid and glucocorticoid replacement (in case of CAH), and/or sexual steroid replacement if any of these are underproduced or after gonadectomy. In the case of bilateral gonadectomy, HRT is essential to replace the hormone production of the removed gonadal tissue, in order to ensure optimal epyphisial closure, sexual development, psychological and relational/sexual wellness, and prevent the side-effects of hypogonadism. HRT in connection with intersex variances differs by age and the needs of the patien.

The classic HRT for AIS patients after gonadectomy

Children: oral ethinyl oestradiol 2.5–5 µg/day or 50–100 ng/kg/day, slowly increased every 6 months until reaches adult dose: 20-25 µg/day;

Standard adult doses: oral ethinyl oestradiol 20–25 µg/day; oestradiol valerate 2mg, conjugated equine oestrogens 0.625mg; transdermal oestradiol 50µg daily; oestradiol implant 50mg every 6 months or mixed testosterone esters (Sustanon) 250mg every 4 weeks.

(Some studies also mention the positive effect of testosterone therapy (in addition to estrogen

therapy) on sexual desire of CAIS patients.)

HRT in congenital adrenal hyperplasia

CAH hormonal treatment for children:

10-15 mg/m2/day of hydrocortisone divided into 3 daily doses; or 2–4 mg/m2/day prednisolone (one fifth of the hydrocortisone dosage), twice daily; or 0.25–0.375 mg/m2/day dexamethasone, once daily (for glucocorticoid replacement).

0.05 to 0.2 mg/day fludrocortisone (for mineralocorticoid replacement)

CAH hormonal treatment for adults:

Instead of 3 daily doses, the recommended adult therapy includes 2 daily doses of hydrocortisone: 15–20 mg in the morning, and 5–10 mg after lunch.

0.05–0.2 mg/d, fludrocortisone acetate (for mineralocorticoid replacement)

For women with androgen predominance symptoms or for whom fertility is important, other therapeutic options should be considered.

Mineralicorticoid treatment must be monitored by blood pressure measurements (in both sitting and standing position to detect the presence of orthostasis), serum electrolyte levels (potassium concentration), and plasma renin activity or direct renin levels.

Chromosome variations and hormone therapy:

Hormonal therapy after gonadectomy in a study by Huang and colleagues for patients with a uterus included oral oestradiol in doses of 2 mg daily and oral dydrogesterone in doses of 10 mg for 14 days each month after surgery and adjuvant chemotherapy, while for patients without a uterus a daily oestradiol monotherapy (2mg) was administered. In Klinefelter syndrome, androgen hormone therapy might promote more body fat

than in the average population and brain development (improved cognitive and psychosocial development). A higher correlation of low oestrogen level and X trisomy has been discovered, since oestrogen is known to have an important role in bone and cardiac health; therefore, the EXtraordinarY Babies study will try to define the opportunity and benefits of early hormonal therapy. Nonetheless, Tartaglia and colleagues highlight that longitudinal studies are necessary, and that undiscovered genetic factors must be investigated. They also urge routine neonatal screenings for sex chromosome trisomies in order to gain relevant information on the whole population and not just on those who struggle with health problems.

4.2.5.d) Risks and side effects of hormone therapies

Inquire about whether your patient requires information on the effect of hormone therapy on reproductive functions because the long-term use of hormones reduces fertility and increases the risk of permanent infertility. If the patient wishes, the option of the preservation of gametes (sperm, mature oocyte or embryo cryopreservation) should be offered before starting hormone therapy. Due to hormone therapy, some patients might experience reduced libido (erectile function and ejaculation can be present before penectomy). It is also important to highlight that although testosterone reduces fertility, pregnancy can occur if the uterus and the ovaries are intact, therefore, if necessary, the usage of contraception (condom) or an intrauterine device is recommended if the patient wishes to prevent pregnancy.

Risks and side effects of testosterone-blockers, progesterone, oestrogens and GnRH analogues might include (Lawrence 2007; Cohen-Kettenis, Delemarre-van de Waal and Gooren 2008; Weyers et al. 2010):

- Venous thromboembolic (deep vein thrombosis, pulmonary embolism)
 - Particularly in patients with other risk factors (over age 40, smokers, highly sedentary, obese, have thrombophilic disorders)
- 3rd generation of progestins further increases risk
- Transdermal application of oestrogen reduces DVT risk
- Triglyceridaemia (effects on levels of HDL cholesterol, LDL cholesterol and lipoprotein)
- Increasing the risk of cholelitis and pancreatitis
- Weight gain
- Elevated liver function values
- Decreased libido
- Erectile dysfunction
- Infertility
- Hyperkalemia
- Hypertension (oestrogen increases, while spironolactone reduces blood pressure)
- Type 2 diabetes (particularly among patients with a family history of diabetes or other risk factors)
- Increased cardiovascular risk (if additional risk factors are present)
- Hyperprolactinemia, prolactinoma
- Current evidence indicates that there is no increased risk of breast cancer, though longer duration of feminising hormone exposure (i.e., number of years taking oestrogen preparations), family history of breast cancer, obesity (BMI >35), and the use of progestins likely influence the level of risk.
- Elevated risk of prostate cancer

Risks and side effects of progestogens and testosterone might include (Feldman and Safer 2009, Weyers et al. 2010; Lawrence 2007):

- Polycythemia
- Weight gain
- Acne and male-pattern baldness
- Sleep apnoea
- Elevated liver function values

- Dyslipidemia – decreases HDL, affects LDL and triglycerides (especially in conjunction with PCOS)
- Increased risk of hypomanic, manic, or psychotic symptoms
- Hypertension
- Type 2 diabetes (if additional risk factors are present)
- Cardiovascular disease (if additional risk factors: weight gain, family history, and polycystic ovarian syndrome are present)
- Evidence suggests no increased risk of breast or cervical cancer.
- Might increase the risk of ovarian and uterine cancer

4.2.6) Sexually transmitted diseases

When discussing the topic of sexually transmitted diseases, using the terms ‘men who have sex with men’ (MSM) and ‘women who have sex with women; (WSW) is more precise in relation to issues associated with activity rather than identity. The populations most affected by HIV and STIs are men who have sex with men (MSM) and transgender women, but every sexually active person has a risk of acquiring an STI. Risk behaviours include unprotected intercourse, sex work, sex while under the influence of drugs or alcohol and multiple or anonymous partners.

4.2.6.a) HIV and acquired immunodeficiency syndrome (AIDS)

The infectious agent is the Human Immunodeficiency Virus (HIV), a retrovirus with two distinct types, HIV-1 and HIV-2. They have similar epidemiological characteristics, though the pathogenicity of HIV-2 is lower. In developed countries, the majority of HIV infections are HIV-1.

The mode of transmission is person to person transmission through unprotected sexual intercourse; contact of abraded skin or mucosa with body secretions; blood transfusion or intravenous drug use.

The incubation period is variable. The average time from infection to the development of detectable antibodies is generally 1–3 months. Within several weeks to months after the transmission of HIV, many persons develop an acute mononucleosis-like illness lasting for a couple of weeks. They may then be free of clinical signs or symptoms for months or years before other clinical manifestations develop. If untreated, the infection progresses and HIV-related opportunistic infections or cancers appear, signalling a stage of acquired immune deficiency syndrome (AIDS). AIDS is defined as an HIV infection with a CD4+ T cell count below 200 cells/μL or the occurrence of specific diseases associated with HIV infection. HIV associated infections are pneumocystis pneumonia, candidiasis, tuberculosis, cryptococcal meningitis, toxoplasmosis or cytomegalovirus infection. Cancers associated with AIDS are Kaposi's sarcoma, non-Hodgkin lymphoma, primary central nervous system lymphoma, and cervical cancer.

Effective antiretroviral treatment (ART) can control the virus and prevent the transmission to other people. HIV-positive people who are receiving effective ART and their viral load has been undetectable for 6 months or more do not transmit HIV to their sexual partners. (In a short form, this is referred to as ‘undetectable=untransmittable’ (U=U).)

Correct and consistent condom use effectively reduces the risk of HIV transmission. In certain circumstances pre- and post-exposure prophylaxis may be considered.

Post-exposure prophylaxis (PEP), a short-term ART reduces the risk of HIV infection after potential exposure.

Pre-exposure prophylaxis (PrEP) is an available option for people who are at very high risk of getting an HIV infection. It consists of a daily course of antiretroviral drugs taken by HIV-negative people. When taken as prescribed, PrEP is highly effective in preventing HIV transmission (Chou et al. 2019).

For sexually active MSM, screening for HIV is recommended annually, for those at high-risk (engaging in chemsex, sex with multiple or anonymous partners, sex work) testing is recommended every 3-6 months. Sexually active transgender individuals – especially those who have sex with men – are at high risk of HIV infection therefore should be screened similarly to MSM (Becasen et al. 2019).

In the case of an identified infection, a case report to the local health authority is mandatory and the investigation of contacts and the source of infection is required. Care must be taken to protect confidentiality.

4.2.6.b) Human papillomavirus (HPV) infection

Human papillomavirus infection is caused by the human papillomavirus (HPV), a DNA virus from the papillomavirus family. There are more than 100 types of HPV, of which at least 14 are classified as high-risk types. These are established human carcinogens and have a causal role in the development of cervical, anal, penile, vulvar, vaginal and oropharyngeal cancers. Low-risk types are responsible for genital warts (condyloma acuminatum) and recurrent respiratory papillomatosis.

HPV is transmitted through direct contact with anogenital skin, mucous membranes and with bodily fluids. It can be passed through vaginal, anal, and oral sex. HPV infections are the most common STI, and nearly all individuals are infected at some point in their lives. Approximately

90% of HPV infections are asymptomatic and resolve spontaneously within two years. In some cases, high-risk type HPV infection progresses to cervical dysplasia and neoplasia, consequently leading to cervical cancer. At the anus, high-grade anal intraepithelial neoplasia (AIN) is a precursor of anal cancer.

Condom use reduces the risk for genital human papillomavirus (HPV) infection, but does not eliminate it completely, as the transmission can occur through skin-to-skin contact in areas that are not covered by the condom. Immunisation against the most common types decreases the risk of HPV associated cancers and genital warts. The HPV vaccine is recommended for routine vaccination at age 11 or 12 years (before the onset of sexual activity) for both sexes.

4.2.6.c) Hepatitis A Virus infection

The Hepatitis A Virus is a naked RNA virus that causes acute viral hepatitis. The Hepatitis A infection is not a sexually transmitted disease, but it is known to cause outbreaks among MSM (ECDC 2019).

The Hepatitis A Virus is transmitted through faecal-oral route, and rarely through blood exposure. In developed countries, there are low circulating levels of hepatitis A virus, though outbreaks occasionally occur. After an incubation period of 30 days, symptoms start with fever, malaise, weight loss, nausea, and abdominal discomfort, followed within a few days by jaundice. Acute liver failure rarely occurs. The clinical illness lasts approximately eight weeks, occasionally longer (up to 6 months) but chronic HAV infection has not been reported.

The hepatitis A vaccine is effective for prevention, and immunisation against HAV infection is recommended for men who have sex with men. In the case of an identified infection, a case report to the local health authority is mandatory.

4.2.6.d) Hepatitis B Virus infection

The Hepatitis B Virus is a DNA virus that causes Hepatitis B infection. It is transmitted through sexual contact, blood transfusion or during intravenous drug use. In developed countries the lifetime risk of infection is low (<20%), and most infections occur in adult risk groups, through intravenous drug use and sexual intercourse.

Approximately 50% of adults who have acute infections are asymptomatic. After an incubation period of 60-90 days, the illness starts with non-specific symptoms of malaise, fever, headache, myalgia lasting 3 to 10 days. It is followed by an icteric phase that usually lasts from 1 to 3 weeks and is characterised by jaundice, light or grey stool, hepatic tenderness, and hepatomegaly. Convalescence may last for weeks or months. Chronic hepatitis B infection occurs in less than 10%, but it can lead to cirrhosis and hepatocellular carcinoma.

Condom use protects against transmission. The hepatitis B vaccine is effective for prevention, therefore immunisation against HBV infection is recommended for men who have sex with men. In the case of accidental exposure, passive immunisation with specific hepatitis B immunoglobulin is recommended for preventing the infection. Screening for Hepatitis B by testing for HBsAg is recommended for sexually active MSM.

If the infection is identified, a case report to the local health authority is mandatory.

4.2.6.e) Hepatitis C Virus infection

The Hepatitis C Virus is a single-stranded RNA virus that causes Hepatitis C infection.

It is transmitted mainly through intravenous drug use and blood transfusions, though sexual transmission is possible. The transmission risk is higher in case of unprotected anal inter-

course, especially in the case of HIV or other STI coinfection.

In Europe, between 0.5% and 3% of people live with a chronic Hepatitis C infection. Acute symptoms develop in 20–30% of infected people. After 6–9 weeks of incubation the symptoms appear: fatigue, nausea and vomiting, fever, muscle or joint pains, abdominal pain, decreased appetite and weight loss, jaundice, dark urine, and light or grey stool. About 80% of patients develop a chronic infection that after several years can progress into cirrhosis and liver cancer. HCV infection is more likely to become chronic in presence of HIV, therefore testing for Hepatitis C antibodies is recommended at least annually for at-risk HIV-positive MSM.

A Hepatitis C vaccine is not yet available, so condom use is recommended to prevent hepatitis C transmission. If an infection is identified, a case report to the local health authority is mandatory.

4.2.6.f) Anogenital herpes infection

Anogenital herpes infection is caused by Herpes simplex virus (HSV) types 1 and 2. HSV-2 is mainly associated with anogenital infection, although HSV-1 too can cause genital infection.

Genital herpes is a common STI that occurs mainly in adults. Most infected people do not have primary genital symptoms, although 25% experience recurrent genital ulcerations. The primary infection may be mild and unapparent; overt disease (10%) may appear with fever and malaise lasting a week or more, accompanied by vesicular lesions on cervix, vulva, glans penis, prepuce, anus, and rectum. Recurrent ulceration generally appears on the vulva, perineal skin, legs, and buttocks. Other genital or perianal sites, as well as the mouth, may be affected.

The transmission of HSV-2 occurs through direct contact with the skin surface or secretions

of an infected person, usually by oral, anal, or vaginal sexual intercourse. Condom use reduces transmission risk.

A HSV-2 infection increases the risk of acquiring a new HIV infection. Furthermore, people with both HIV and HSV-2 infection are more likely to spread HIV to others. HSV-2 is one of the most frequent co-infections of HIV, it occurs in 60-90% of HIV-positive persons.

Antiviral treatment such as acyclovir, famciclovir and valacyclovir can reduce the severity and frequency of symptomatic episodes.

4.2.6.g) Gonorrhoea (gonococcal infection)

Gonorrhoea is a sexually transmitted disease caused by the bacterium Neisseria gonorrhoeae. Gonococcal infection is transmitted by contact with exudates from the mucous membranes of infected people, as a result of sexual activity during vaginal, anal and oral sex.

Gonococcal infection can be manifested as an acute purulent discharge from the urethra with dysuria within 2–7 days after exposure. A small percentage of gonococcal infections is asymptomatic. Another form of infection is mucopurulent cervicitis. It can be asymptomatic, although some may have abnormal vaginal discharge and bleeding after intercourse. In 20% of cases, gonococcal infection leads to endometritis, salpingitis or pelvic peritonitis with a subsequent risk of infertility and ectopic pregnancy.

Pharyngeal and anorectal infections can occur, and, while usually asymptomatic, may cause pruritus, tenesmus, and discharge.

Correct and consistent condom use reduces the risk of transmission. For sexually active MSM, screening for gonorrhoea is recommended annually, for those at high-risk (chemsex, sex with

multiple or anonymous partners, sex work) every 3-6 months. Depending on sexual exposure, pharyngeal and rectal sites should be tested too. Sexually active transgender individuals – especially those who have sex with men – should be screened similarly to MSM men.

Gonococcal infection is usually treated with a short course of antibiotics, though the increasing antibiotic resistance constitutes a concern. A case report to the local health authority is mandatory, and the investigation of contacts and the source of infection as well as notifying sexual partners is required.

4.2.6.h) Syphilis

Syphilis is a sexually transmitted bacterial infection caused by Treponema pallidum

The mode of transmission is a direct contact with infectious exudates from lesions on skin and mucous membranes of infected people during oral, anal, or vaginal intercourse. Transplacental infection occurs during pregnancy.

The rise in the incidence of reported primary and secondary syphilis has been mostly attributable to an increased number of cases among MSM. The estimated rates of syphilis are substantially higher in the MSM population (de Voux et al. 2017).

Syphilis infection is characterised clinically by a primary lesion, a secondary eruption involving skin and mucous membranes, long periods of latency, and late lesions of skin, bone, viscera, the CNS and cardiovascular system. The primary lesion (chancre) appears about 3 weeks after exposure as an indurated, painless ulcer with a serous exudate at the site of initial invasion. Chancres can occur on or around the external genitals, vagina, rectum, anus, or mouth. After 4–6 weeks the chancre begins to involute and a generalised secondary eruption appears. Sec-

ondary manifestations resolve spontaneously within weeks or a couple of months. The untreated cases will go on to latent infection, which can last for years, and approximately the third of infected people develop tertiary syphilis.

Condom use reduces the risk of transmission but does not eliminate it completely, as the transmission can occur if the syphilitic sore is not covered by the condom.

For sexually active MSM, syphilis serology is recommended annually, for those at high risk (chemsex, sex with multiple or anonymous partners, sex work) testing is recommended every 3-6 months. Sexually active transgender individuals – especially those who have sex with men – should be screened similarly to MSM men. Congenital syphilis is prevented by syphilis serology in early pregnancy as a routine part of prenatal examination.

Parenteral penicillin is first line treatment in syphilis. A case report to the local health authority is mandatory and the investigation of contacts and the source of infection is required.

4.2.6.i) Chlamydial genital infection

Chlamydial genital infection is caused by *Chlamydia trachomatis* immunotypes D through K. It is transmitted through vaginal, anal, and oral sexual intercourse.

Chlamydial genital infection is manifested primarily as urethritis or as a cervical infection. Urethritis is often difficult to distinguish from gonococcal infection and includes mucopurulent discharges, urethral itching, and burning on urination. Asymptomatic infection occurs in 1%–25%. Possible complications or sequelae of urethral infections include epididymitis, infertility and Reiter syndrome.

In the case of cervical infection, clinical manifestations may be similar to those of gonorrhoea and may present as a mucopurulent endocervical discharge, with oedema, erythema and easily induced endocervical bleeding caused by inflammation of the endocervical columnar epithelium. Up to 70% of cervical chlamydial infections may be asymptomatic. Complications include salpingitis, inflammation of the endometrium and fallopian tubes with subsequent risk of infertility, ectopic pregnancy, or chronic pelvic pain. Asymptomatic chronic infections increase the risk of complications. Endocervical chlamydial infection has been associated with an increased risk of acquiring HIV infection.

Because gonococcal and chlamydial infections are often difficult to distinguish clinically, a treatment for both organisms is recommended when one is suspected, with a short course of oral antibiotics.

Lymphogranuloma venereum (LGV), caused by serovars L1, L2, and L3 has recently emerged as a cause of outbreaks of proctitis among men who have sex with men (MSM) (de Vrieze and de Vries 2014).

Condom use reduces the risk of transmission. Chlamydia is a notifiable disease, a case report to the local health authority is mandatory and the investigation of contacts and the source of infection is required. The concurrent treatment of regular sex partners is advisable.

For sexually active MSM, triple-site testing (first void urine, pharyngeal and rectal sites) is recommended annually, for those at high risk up to every 3-6 months. Sexually active transgender individuals – especially those who have sex with men – should be screened similarly to MSM men.

References

- Andersen, Judith P., & John, Blosnich. 2013. “Disparities in Adverse Childhood Experiences among Sexual Minority and Heterosexual Adults: *Results from a Multi-State Probability-Based Sample*” edited by L. Chao. PLoS ONE 8(1):e54691. <https://doi.org/10.1371/journal.pone.0054691>
- Arcelus, Jon, Alex J. Mitchell, Jackie Wales & Søren Nielsen. 2011. “Mortality Rates in Patients With Anorexia Nervosa and Other Eating Disorders: *A Meta-Analysis of 36 Studies*.” Archives of General Psychiatry 68(7):724. <https://doi.org/10.1001/archgenpsychiatry.2011.74>
- Ashworth, Alice. 2012. “Sexual orientation: a guide for the NHS”. Stonewall Group. <https://www.stonewall.org.uk/sites/default/files/stonewall-guide-for-the-nhs-web.pdf>
- Austin, S. Bryn, Najat, J. Ziyadeh, Heather, L. Corliss, Margaret, Rosario, David, Wypij, Jess Haines, Carlos A. Camargo & Alison E. Field. 2009. “Sexual Orientation Disparities in Purging and Binge Eating From Early to Late Adolescence.” *Journal of Adolescent Health*, 45(3):238–45. <https://doi.org/10.1016/j.jadohealth.2009.02.001>
- Avila, Jonathan T., Neville, H. Golden, & Tandy, Aye. 2019. “Eating Disorder Screening in Transgender Youth.” *Journal of Adolescent Health*, 65(6):815–17. <https://doi.org/10.1016/j.jadohealth.2019.06.011>
- Babor, Thomas F. & John C. Higgins-Biddle. 2001. Brief Intervention for Hazardous and Harmful Drinking (AUDIT) A Manual for Use in Primary Care. WHO/MSD/MSB/01.6b. World Health Organization.
- Banwari, G., Mistry K., Soni, A., Parikh, N. & Gandhi, H. 2015. Medical students and interns’ knowledge about and attitude towards homosexuality. J Postgrad Med 61(2):95-100
- Barbara, A.M., Chaim, G. & Doctor, F. 2004. Asking the right questions, 2: talking about sexual orientation and gender identity in mental health, counselling, and addiction settings. Toronto (ON): Centre for Addiction and Mental Health.
- Beach, Lauren B., Tom, A. Elasy, & Gilbert Gonzales. 2018. “Prevalence of Self-Reported Diabetes by Sexual Orientation: *Results from the 2014 Behavioral Risk Factor Surveillance System*.” LGBT Health 5(2):121–30. <https://doi.org/10.1089/lgbt.2017.0091>
- Becasen, Jeffrey S., Christa L. Denard, Mary M. Mullins, Darrel H. Higa, and Theresa Ann Sipe. 2019. “Estimating the Prevalence of HIV and Sexual Behaviors Among the US Transgender Population: A Systematic Review and Meta-Analysis, 2006–2017.” American Journal of Public Health 109(1):e1–8. <https://doi.org/10.2105/AJPH.2018.304727>
- Beren, Susan E., Helen, A. Hayden, Denise, E. Wilfley & Carlos M. Grilo. 1996. “The Influence of Sexual Orientation on Body Dissatisfaction in Adult Men and Women.” *The International Journal of Eating Disorders*, 20(2):135–41. [https://doi.org/10.1002/\(SICI\)1098-108X\(199609\)20:2<135::AID-EAT3>3.0.CO;2-H](https://doi.org/10.1002/(SICI)1098-108X(199609)20:2<135::AID-EAT3>3.0.CO;2-H)
- Berger, I. & Mooney-Somers, J. 2016. “Smoking Cessation Programs for Lesbian, Gay, Bisexual, Transgender, and Intersex People: *A Content-Based Systematic Review*.” *Nicotine & Tobacco Research*, ntw216. <https://doi.org/10.1093/ntr/ntw216>
- Boehmer, U., Miao, X., Maxwell, N.I., & Ozonoff, A. 2014. “Sexual Minority Population Density and Incidence of Lung, Colorectal and Female Breast Cancer in California.” *BMJ Open* 4(3):e004461. <https://doi.org/10.1136/bmjopen-2013-004461>
- Boehmer, U., Ozonoff, A., & Miao, X. 2011. “An Ecological Analysis of Colorectal Cancer Incidence and Mortality: Differences by Sexual Orientation.” *BMC Cancer* 11(1):400. <https://doi.org/10.1186/1471-2407-11-400>
- Bradford, J.B., Cahill, S., Grasso C., & Makadon, H.J 2012. How to gather data on sexual orientation

- and gender identity in clinical settings. The Fenway Institute. https://fenwayhealth.org/wp-content/uploads/2015/09/Policy_Brief_HowtoGather..._v3_01.09.12.pdf
- Branstetter, A.J., McRee A.L. & Reiter, P.L. 2017. “Correlates of Human Papillomavirus Infection Among a National Sample of Sexual Minority Women.” *Journal of Women’s Health* 26(9):1004–11. <https://doi.org/10.1089/jwh.2016.6177>
 - Bränström, R. 2017. “Minority Stress Factors as Mediators of Sexual Orientation Disparities in Mental Health Treatment: A Longitudinal Population-Based Study.” *Journal of Epidemiology and Community Health* 71(5):446–52. <https://doi.org/10.1136/jech-2016-207943>
 - Brotman, S., Ryan, B., Jalbert, Y., & Rowe, B. 2002. The Impact of Coming Out on Health and health-care Access: The Experiences of Gay, Lesbian, Bisexual and Two-Spirit People. *Journal of health & social policy*. 15. 1-29. https://doi.org/10.1300/J045v15n01_01
 - Bruce, B., Wong, N.K., Shuh, A., Abramowicz, A., Dash, D., Esmail, A., & Kennedy. R. 2018. “A Qualitative Study of Tobacco Interventions for LGBTQ+ Youth and Young Adults: *Overarching Themes and Key Learnings*.” *BMC Public Health* 18(1):155. <https://doi.org/10.1186/s12889-018-5050-4>
 - Caceres, B.A., Brody, A.A., Halkitis, A.N., Dorsen, C., Yu, G., & Chyun, D.A. 2018. “Sexual Orientation Differences in Modifiable Risk Factors for Cardiovascular Disease and Cardiovascular Disease Diagnoses in Men.” *LGBT Health* 5(5):284–94. <https://doi.org/10.1089/lgbt.2017.0220>
 - Calzo, J.P., Blashill, A.J., Brown, T.A., & Argenal, R.L. 2017. “Eating Disorders and Disordered Weight and Shape Control Behaviors in Sexual Minority Populations.” *Current Psychiatry Reports* 19(8):49. <https://doi.org/10.1007/s11920-017-0801-y>
 - Carswell, J. M. & Roberts, S. A. 2017. Induction and Maintenance of Amenorrhea in Transmasculine and Nonbinary Adolescents. *Transgender health*, 2(1), 195–201. <https://doi.org/10.1089/trgh.2017.0021>
 - Castagnoli, C. 2010. Transgender Persons' Rights in the EU Member States: European Parliament Directorate General for Internal Policies, Policy Department C: Citizens' Rights and Constitutional Affairs. PE 425.621, Brussels, June. https://www.europarl.europa.eu/RegData/etudes/note/join/2010/425621/IPOL-LIBE_NT%282010%29425621_EN.pdf
 - Centers for Disease Control and Prevention (CDC) 2019. A Guide for the Healthcare Professional: DISCUSSING SEXUAL HEALTH with Your Patients. <https://www.cdc.gov/hiv/clinicians/screening/discussing-sexual-health.html>
 - Centers for Disease Control and Prevention (CDC) 2020. Collecting Sexual Orientation and Gender Identity Information. <https://www.cdc.gov/hiv/clinicians/transforming-health/health-care-providers/collecting-sexual-orientation.html>
 - Chou, R., Evans, C., Hoverman, A., Sun, C., Dana, T., Bougatsos, C., Grusing, S., & Korthuis, P.T. 2019. “Preexposure Prophylaxis for the Prevention of HIV Infection: *Evidence Report and Systematic Review for the US Preventive Services Task Force*.” *JAMA* 321(22):2214. <https://doi.org/10.1001/jama.2019.2591>
 - Clark, C.J., Borowsky, I.W., Salisbury, J., Usher, J., Spencer, R.A., Przedworski, J.M., Renner, L.M, Fisher, C., & Everson-Rose, S.A. 2015. “Disparities in Long-Term Cardiovascular Disease Risk by Sexual Identity: The National Longitudinal Study of Adolescent to Adult Health.” *Preventive Medicine* 76:26–30. <https://doi.org/10.1016/j.ypmed.2015.03.022>
 - Cohen-Kettenis, P.T., Delemarre-van de Waal, H.A., & Gooren, L. J. (2008). The treatment of adolescent transsexuals: changing insights. *The journal of sexual medicine*, 5(8), 1892–1897. <https://doi.org/10.1111/j.1743-6109.2008.00870.x>
 - Conron, K. J., Mimiaga, M.J. & Landers, S.J. 2010. “A Population-Based Study of Sexual Orientation Identity and Gender Differences in Adult Health.” *American Journal of Public Health* 100(10):1953–60. <https://doi.org/10.2105/AJPH.2009.174169>
 - Coulter, E. W. S., Kinsky, S.M., Herrick, A.L., Stall R.D., & Bauermeister J.A. 2015. “Evidence of Syndemics and Sexuality-Related Discrimination Among Young Sexual-Minority Women.” *LGBT Health* 2(3):250–57. <https://doi.org/10.1089/lgbt.2014.0063>
 - Cunningham, T.J., Xu, F. & Town, M. 2018. “Prevalence of Five Health-Related Behaviors for Chronic Disease Prevention Among Sexual and Gender Minority Adults — 25 U.S. States and Guam, 2016.” *MMWR. Morbidity and Mortality Weekly Report*, 67(32):888–93. <https://doi.org/10.15585/mmwr.mm6732a4>
 - Daling, J.R., Madeleine, M.M, Johnson, L.G., Schwartz, S.M., Shera, K.A., Wurscher, M.A., Carter, J.J., Porter, P.L., Galloway D.A. & McDougall J.K. 2004. “Human Papillomavirus, Smoking, and Sexual Practices in the Etiology of Anal Cancer.” *Cancer* 101(2):270–80. <https://doi.org/10.1002/cncr.20365>
 - Davids, C.M., & Green, M.A. 2011. “A Preliminary Investigation of Body Dissatisfaction and Eating Disorder Symptomatology with Bisexual Individuals.” *Sex Roles* 65(7–8):533–47. <https://doi.org/10.1007/s11199-011-9963-y>
 - de Voux, A, Kidd, S., Grey, J.A., Rosenberg, E.S., Gift, T.L., Weinstock, H. & Bernstein, K.T. 2017. “State-Specific Rates of Primary and Secondary Syphilis Among Men Who Have Sex with Men — United States, 2015.” *MMWR. Morbidity and Mortality Weekly Report*, 66(13):349–54. <https://doi.org/10.15585/mmwr.mm6613a1>
 - de Vrieze, N.H.N, and de Vries. H.J.C. 2014. “Lymphogranuloma Venereum among Men Who Have Sex with Men. An Epidemiological and Clinical Review.” *Expert Review of Anti-Infective Therapy*, 12(6):697–704. <https://doi.org/10.1586/14787210.2014.901169>
 - Detrie, P.M., & Lease, H.S. 2007. “The Relation of Social Support, Connectedness, and Collective Self-Esteem to the Psychological Well-Being of Lesbian, Gay, and Bisexual Youth.” *Journal of Homosexuality*, 53(4):173–99. <https://doi.org/10.1080/00918360802103449>
 - Diemer, E.W., Grant, J.D., Munn-Chernoff, M.A., Patterson, D.A., & Duncan, A.E. 2015. “Gender Identity, Sexual Orientation, and Eating-Related Pathology in a National Sample of College Students.” *Journal of Adolescent Health*, 57(2):144–49. <https://doi.org/10.1016/j.jadohealth.2015.03.003>
 - Dilley, J. A., Spigner, C., Boysun, M. J., Dent, C. W. & Pizacani, B. A. 2008. “Does Tobacco Industry Marketing Excessively Impact Lesbian, Gay and Bisexual Communities?” *Tobacco Control* 17(6):385–90. <https://doi.org/10.1136/tc.2007.024216>
 - Doty, N:D., Willoughby, B.L.B., Lindahl, K.M. & Malik, N.M. 2010. “Sexuality Related Social Support Among Lesbian, Gay, and Bisexual Youth.” *Journal of Youth and Adolescence*, 39(10):1134–47. <https://doi.org/10.1007/s10964-010-9566-x>
 - Dragon, C.N., Guerino, P., Ewald, E. & Laffan, A.M. 2017. “Transgender Medicare Beneficiaries and Chronic Conditions: Exploring Fee-for-Service Claims Data.” *LGBT Health* 4(6):404–11. <https://doi.org/10.1089/lgbt.2016.0208>
 - Dunjić-Kostić, B.; Pantović, M.; Vuković, V.; Randjelović, D.; Totić-Poznanović, S.; Damjanović, A.; Jašović-Gašić, M.; & Ivković, M. 2012. Knowledge: A Possible Tool in Shaping Medical Professionals’ Attitudes towards Homosexuality. *Psychiatr Danub* 24(2), 143–151.
 - ECDC. 2019. Annual Epidemiological Report for 2016 Hepatitis A. Stockholm: ECDC.
 - Effrig, J.C., Bieschke, K.J. & Locke B.D. 2011. “Examining Victimization and Psychological Distress in Transgender College Students.” *Journal of College Counseling*, 14(2):143–57. <https://doi.org/10.1002/j.2161-1882.2011.tb00269.x>
 - Eliason, M.J., Dibble, S.L., Gordon, R. & Soliz, G.B. 2012. “The Last Drag: An Evaluation of an LGBT-Specific Smoking Intervention.” *Journal of Homosexuality*, 59(6):864–78. <https://doi.org/10.1080/00918369.2012.694770>
 - Ellis S., Bailey L. & McNeil J. 2015. Trans People's Experiences of Mental Health and Gender Identity Services: A UK Study. *Journal of Gay & Lesbian Mental Health*, 19. 4-20. <https://doi.org/110.1080/193>

- Emory, K., Kim, Y., Buchting, F., Vera, L., Huang, J. & Emery, S.L. 2016. "Intragroup Variance in Lesbian, Gay, and Bisexual Tobacco Use Behaviors: Evidence That Subgroups Matter, Notably Bisexual Women." *Nicotine & Tobacco Research*, 18(6):1494–1501. <https://doi.org/10.1093/ntr/ntv208>
- Engels, E.A., Biggar, R.J. Hall, H.I., Cross, H., Crutchfield, A., Finch, J.L., Grigg, R., Hylton, T., Pawlish, K.S., McNeel, T.S. & Goedert, J.J. 2008. "Cancer Risk in People Infected with Human Immunodeficiency Virus in the United States." *International Journal of Cancer*, 123(1):187–94. <https://doi.org/10.1002/ijc.23487>
- Everett, B. & Mollborn, S. 2013. "Differences in Hypertension by Sexual Orientation Among U.S. Young Adults." *Journal of Community Health*, 38(3):588–96. <https://doi.org/10.1007/s10900-013-9655-3>
- Fakin R. & Lorenzini R. 2020. Augmentation Mammoplasty in Trans Women. In: Cordova A., Innocenti A., Toia F., Tripoli M. (eds) Plastic and Cosmetic Surgery of the Male Breast. Springer, Cham. https://doi.org/10.1007/978-3-030-25502-2_16
- Feldman J. & Safer J. 2009. Hormone Therapy in Adults: Suggested Revisions to the Sixth Version of the Standards of Care, *International Journal of Transgenderism*, 11:3, 146182. <https://doi.org/10.1080/15532730903383757>
- Feldman, M. B. & Meyer, H.I. 2007. "Eating Disorders in Diverse Lesbian, Gay, and Bisexual Populations." *International Journal of Eating Disorders*, 40(3):218–26. <https://doi.org/10.1002/eat.20360>
- Fogel, S.C., McElroy, J.A., Garbers, S., McDonnell, C., Brooks, J., Eliason, M.J., Ingraham, N., Osborn, A., Rayyes, N., Redman, S.D., Wood, S.F. & Haynes, S.G. 2016. "Program Design for Healthy Weight in Lesbian and Bisexual Women: A Ten-City Prevention Initiative." *Women's Health Issues*, 26:S7–17. <https://doi.org/10.1016/j.whi.2015.10.005>
- Gao, J. & Mansh, M. 2016. "Sexual Orientation Disparities in the Prevalence of Asthma and Allergic Rhinitis among US Adults." *Annals of Allergy, Asthma & Immunology*, 117(4):435–437.e2. <https://doi.org/10.1016/j.anai.2016.07.029>
- García MM. 2018. Sexual Function After Shallow and Full-Depth Vaginoplasty: Challenges, Clinical Findings, and Treatment Strategies- Urologic Perspectives. *Clin Plast Surg*. Jul;45(3):437–446. <https://doi.org/10.1016/j.cps.2018.04.002>
- García R.R. & Ayuso-Mateos J.L. 2019. CIE-11 y la despatologización de la condición transgénero (ICD-11 and the depathologisation of the transgender condition). *Rev Psiquiatr Salud Ment (Barc.)*. 12:65–67.
- Gardner, I. & Safer, J. D. 2013. Progress on the road to better medical care for transgender patients. *Current Opinion in Endocrinology, Diabetes and Obesity*, 20(6): 553–558.
- Gay and Lesbian Medical Association (GLMA). 2006. Guidelines for Care of Lesbian, Gay, Bisexual and Transgender Patients. <http://www.glma.org/index.cfm?fuseaction=Page.viewPage&page-Id=622&parentID=534>
- Ghasemi, P., Shaghaghi, A. & Allahverdipour, H. 2015. "Measurement Scales of Suicidal Ideation and Attitudes: A Systematic Review Article." *Health Promotion Perspectives*, 5(3):156–68. <https://doi.org/10.15171/hpp.2015.019>
- Giovanardi G. 2017. Buying time or arresting development? The dilemma of administering hormone blockers in trans children and adolescents. *Porto biomedical journal*, 2(5), 153–156. <https://doi.org/10.1016/j.pbj.2017.06.001>
- Gonzales, G. & Henning-Smith, C. 2017. "Health Disparities by Sexual Orientation: Results and Implications from the Behavioral Risk Factor Surveillance System." *Journal of Community Health*, 42(6):1163–72. <https://doi.org/10.1007/s10900-017-0366-z>
- Gonzales, G., Przedworski, J. & Henning-Smith, C. 2016. "Comparison of Health and Health Risk Factors Between Lesbian, Gay, and Bisexual Adults and Heterosexual Adults in the United

States: Results From the National Health Interview Survey." *JAMA Internal Medicine*, 176(9):1344. <https://doi.org/10.1001/jamainternmed.2016.3432>

- Gooren, L. & Morgentaler, A. 2014, Prostate cancer incidence in orchidectomised male-to-female transsexual persons treated with oestrogens. *Andrologia*, 46: 1156–1160. <https://doi.org/10.1111/and.12208>
- Grabovac, I; Abramovic, M; Komlenovic, G; Milosevic, & M; Mustajbegovic, J. Attitudes towards and knowledge about homosexuality among medical students in Zagreb. *Coll Antropol*. 2014;38:39–45
- GrApSIA and Audí L. 2014. Past Experiences of Adults with Disorders of Sex Development. *Endocrine Development* [Internet]. S. KARGER AG; pp. 138–48. <https://doi.org/10.1159/000363639>
- Grossman, A. H. & D'Augelli, A. R. 2007. "Transgender Youth and Life-Threatening Behaviors." *Suicide and Life-Threatening Behavior*, 37(5):527–37. <https://doi.org/10.1521/suli.2007.37.5.527>
- Haider, A., Adler, R.R, Schneider, E., Uribe Leitz, T., Ranjit, A., Ta, C., Levine, A., Harfouch, O., Pelaez, D., Kodadek, L., Vail, L., Snyder, C., German, D., Peterson, S., & Schuur, J.D., Lau, B.D. 2018. Assessment of Patient-Centered Approaches to Collect Sexual Orientation and Gender Identity Information in the Emergency Department: The EQUALITY Study. *JAMA Netw Open*. 1(8):e186506.
- Heatherton, T.F., Kozlowski, L.T., Frecker, R.C. & Fagerstrom K.O. 1991. "The Fagerstrom Test for Nicotine Dependence: A Revision of the Fagerstrom Tolerance Questionnaire." *Addiction* 86(9):1119–27. <https://doi.org/10.1111/j.1360-0443.1991.tb01879.x>
- Heck, J.E. & Jacobson, J.E. 2006. "Asthma Diagnosis Among Individuals in Same-Sex Relationships." *Journal of Asthma*, 43(8):579–84. <https://doi.org/10.1080/02770900600878289>
- Hewstone, M. & Voci, A. 2009. Diversity and integration: The role of intergroup contact in process of prejudice reduction and conflict resolution. *Psycologia Sociale*, 4. 9–28.
- Hilden, M. 2020. Patient handbogen: Transkønnethed (kønsinkongruens). <https://www.sundhed.dk/borger/patienthaandbogen/sundhedsoplysning/lgbt/transkoennethed-koensinkongruens/>
- Humeniuk, R. & World Health Organization. 2010. The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST): Manual for Use in Primary Care. Geneva: World Health Organization.
- Institute of Medicine (US) 2013. Board on the Health of Select Populations. Collecting Sexual Orientation and Gender Identity Data in Electronic Health Records: Workshop Summary. Washington (DC): National Academies Press (US); 4, Existing Data Collection Practices in Clinical Settings. <https://www.ncbi.nlm.nih.gov/books/NBK154082/>
- Jamal, A., Phillips, Gentzke, E.A.S., Homa, D.M., Babb, S.D., King, B.A. & Neff, L.J. 2018. "Current Cigarette Smoking Among Adults — United States, 2016." *MMWR. Morbidity and Mortality Weekly Report*, 67(2):53–59. <https://doi.org/10.15585/mmwr.mm6702a1>
- Jellestad L., Jäggi T., Corbisiero, S., Schaefer D.J., Jenewein J., Schneeberger, A., Kuhn, A., Garcia Nuñez, D. 2018. "Quality of Life in Transitioned Trans Persons: A Retrospective Cross-Sectional Cohort Study", *BioMed Research International*, 8684625.
- Jiang, D., Witten, J., Berli, J., Dugi, D., 3rd. 2018. Does Depth Matter? Factors Affecting Choice of Vulvoplasty Over Vaginoplasty as Gender-Affirming Genital Surgery for Transgender Women. *The journal of sexual medicine*, 15(6), 902–906. <https://doi.org/10.1016/j.jsxm.2018.03.085>
- Jones, J., Lynch, P., Tenglund, A., & Gaertner, S. 2000. Toward a diversity hypothesis: Multidimensional effects of intergroup contact. *Applied and Preventive Psychology*, 9. 53–62. [https://doi.org/10.1016/S0962-1849\(05\)80037-X](https://doi.org/10.1016/S0962-1849(05)80037-X)
- Juster, R.P., Hatzenbuehler, M.L., Mendrek, A., Pfaus, J.G., Grant Smith, N., Johnson, F.J., Lefebvre-Louis, J.F., Raymond, C., Marin, M.F., Sindi, S., Lupien, S. & Pruessner, J.C. 2015. "Sexual Orientation Modulates Endocrine Stress Reactivity." *Biological Psychiatry*, 77(7):668–76. <https://doi.org/10.1016/j.biopsych.2014.08.013>
- Kelley, L., Chou, C.L., Dibble, S.L., Robertson, P.A. 2008. A critical intervention in lesbian, gay,

bisexual, and transgender health: knowledge and attitude outcomes among second-year medical students. *Teach Learn Med.* 20(3):248-53. <https://doi.org/10.1080/10401330802199567>

- King, B.A., Dube, S. R. & Tynan, M.A. 2012. “Current Tobacco Use Among Adults in the United States: Findings From the National Adult Tobacco Survey.” *American Journal of Public Health*, 102(11):e93–100. <https://doi.org/10.2105/AJPH.2012.301002>
- King, M., Semlyen, J., Tai, S.S., Killaspy, H., Osborn, D., Popelyuk, D. & Nazareth, I. 2008a. “A Systematic Review of Mental Disorder, Suicide, and Deliberate Self Harm in Lesbian, Gay and Bisexual People.” *BMC Psychiatry* 8(1):70. <https://doi.org/10.1186/1471-244X-8-70>
- Kórász, K. 2015. A nemi dysphoria jogi vonatkozásai és a kezelés folyamata Magyarországon, *Orv. Hetil.*, 156(30), 1214–1220.
- Lawrence, A.A. 2007. Transgender health concerns. In I. H. Meyer & M. E. Northridge (Eds.), *The health of sexual minorities: Public health perspectives on lesbian, gay, bisexual, and transgender populations* (p. 473–505). *Springer Science + Business Media*, https://doi.org/10.1007/978-0-387-31334-4_19
- Lee R. 2000. How to talk about sex with patients who are not heterosexual. *West J Med.* 172(6):401-2.
- Licciardello, O., Castiglione C. and Rampullo, A. 2011. Intergroup contact, value system and the representation of homosexuality. *Procedia – Social and Behavioral Sciences*, 30(Supplement C):1467-1471.
- Lindqvist, E. K., Sigurjonsson, H., Möllermark, C., Rinder, J., Farnebo, F., Lundgren, T. K. 2017. Quality of life improves early after gender reassignment surgery in transgender women. *European journal of plastic surgery*, 40(3), 223–226. <https://doi.org/10.1007/s00238-016-1252-0>.
- Liu, R.T., Sheehan, A.E., Walsh, R.F.L., Sanzari, C.M., Cheek, S.M. & Hernandez, E.M. 2019. “Prevalence and Correlates of Non-Suicidal Self-Injury among Lesbian, Gay, Bisexual, and Transgender Individuals: A Systematic Review and Meta-Analysis.” *Clinical Psychology Review*, 74:101783. <https://doi.org/10.1016/j.cpr.2019.101783>
- Lopes, L; Gato J. and Esteves, M. 2016. Portuguese Medical Students’ Knowledge and Attitudes Towards Homosexuality. *Acta Médica Portuguesa*, 29(11), 684-693
- Louis J. Gooren, Erik J. Giltay, Mathijs C. Bunck, Long-Term Treatment of Transsexuals with Cross-Sex Hormones: Extensive Personal Experience, *The Journal of Clinical Endocrinology & Metabolism*, Volume 93, Issue 1, 1 January 2008, Pages 19–25, <https://doi.org/10.1210/jc.2007-1809>,
- Lucas, J. W., Lester, K. M., Chen, A., Simhan, J. 2017. Scrotal reconstruction and testicular prosthetics. *Translational andrology and urology*, 6(4), 710–721. <https://doi.org/10.21037/tau.2017.07.06>
- Lucassen, M. F. G., Merry, S.N., Hatcher, S. & Frampton, C.M.A. 2015. “Rainbow SPARX: A Novel Approach to Addressing Depression in Sexual Minority Youth.” *Cognitive and Behavioral Practice*, 22(2):203–16. <https://doi.org/10.1016/j.cbpra.2013.12.008>
- Machalek, D.A., Poynten, M., Jin, F., Fairley, C.K., Farnsworth, A., Garland, S.M., Hillman, R.J., Petoumenos, K., Roberts, J., Tabrizi, S.N., Templeton, D.J. & Grulich, A.E. 2012. “Anal Human Papillomavirus Infection and Associated Neoplastic Lesions in Men Who Have Sex with Men: A Systematic Review and Meta-Analysis.” *The Lancet Oncology*, 13(5):487–500. [https://doi.org/10.1016/S1470-2045\(12\)70080-3](https://doi.org/10.1016/S1470-2045(12)70080-3)
- Major B., Mendes W.B. & Dovidio J.F. 2013. Intergroup Relations and Health Disparities: A Social Psychological Perspective. *Health psychology: official journal of the Division of Health Psychology*, American Psychological Association, 32(5):514-524.
- Makadon, H.J, Mayer, K.H, Potter, J., Goldhammer, H., American College of Physicians. 2015. The Fenway guide to lesbian, gay, bisexual, and transgender health.
- Manieri, C., Castellano, E., Crespi, C., Di Bisceglie, C., Dell’Aquila, C., Gualerzi, A. & Molo, M. 2014. Medical treatment of subjects with gender identity disorder: the experience in an Italian public health center. *International journal of transgenderism*, 15(2):53–65. <https://doi.org/10.1080/1553273>

9.2014.899174

- Mays, VV.M., Juster, R.P., Williamson, T.J., Seeman, T.E.& Cochran. S.D. 2018. “Chronic Physiologic Effects of Stress Among Lesbian, Gay, & Bisexual Adults: Results From the National Health and Nutrition Examination Survey.” *Psychosomatic Medicine*, 80(6):551–63. <https://doi.org/10.1097/PSY.0000000000000600>
- McDermott, E., Hughes, E. & Rawlings, V. 2018. “The Social Determinants of Lesbian, Gay, Bisexual and Transgender Youth Suicidality in England: A Mixed Methods Study.” *Journal of Public Health*, 40(3):e244–51. <https://doi.org/10.1093/pubmed/fdx135>
- McKay, B. 2011. “Lesbian, Gay, Bisexual, and Transgender Health Issues, Disparities, and Information Resources.” *Medical Reference Services Quarterly*, 30(4):393–401. <https://doi.org/10.1080/02763869.2011.608971>
- McLaughlin, K.A., Hatzenbuehler, M.L., Xuan, Z. & Conron. K.J. 2012. “Disproportionate Exposure to Early-Life Adversity and Sexual Orientation Disparities in Psychiatric Morbidity.” *Child Abuse & Neglect* 36(9):645–55. <https://doi.org/10.1016/j.chiabu.2012.07.004>
- Meads, C., & Moore, D. 2013. “Breast Cancer in Lesbians and Bisexual Women: Systematic Review of Incidence, Prevalence and Risk Studies.” *BMC Public Health*, 13(1):1127. <https://doi.org/10.1186/1471-2458-13-1127>
- Meads, C., Martin, A., Grierson, J. & Varney, J. 2018. “Systematic Review and Meta-Analysis of Diabetes Mellitus, Cardiovascular and Respiratory Condition Epidemiology in Sexual Minority Women.” *BMJ Open* 8(4):e020776. <https://doi.org/10.1136/bmjopen-2017-020776>
- Miller, T. J., Wilson, S. C., Massie, J. P., Morrison, S. D. & Satterwhite, T. 2019. Breast augmentation in male-to-female transgender patients: Technical considerations and outcomes. *JPRAS open*, 21, 63–74. <https://doi.org/10.1016/j.jpra.2019.03.003>
- Monstrey, S., Hoebeke, P., Selvaggi, G., Ceulemans, P., Van Landuyt, K., Blondeel, P., Hamdi, M., Roche, N., Weyers, S., De Cuyper, G. 2009. Penile reconstruction: is the radial forearm flap really the standard technique? *Plast Reconstr Surg.* 124(2):510-518. <https://doi.org/10.1097/PRS.0b013e-3181aeeb06>
- Mustanski, B, Garofalo, R., Herrick, A. & Donenberg, G. 2007. “Psychosocial Health Problems Increase Risk for HIV among Urban Young Men Who Have Sex with Men: Preliminary Evidence of a Syndemic in Need of Attention.” *Annals of Behavioral Medicine* 34(1):37–45. <https://doi.org/10.1007/BF02879919>
- Nagata, J.M., Ganson, K.T. & Austin. S.B. 2020. “Emerging Trends in Eating Disorders among Sexual and Gender Minorities.” *Current Opinion in Psychiatry*, 33(6):562–67. <https://doi.org/10.1097/YCO.0000000000000645>.
- National Health Service (NHS) 2020. Overview – Gender dysphoria. <https://www.nhs.uk/conditions/gender-dysphoria>
- National Health Service (NHS) Department of Health. 2009. Sexual orientation. A practical guide for the NHS. Crown; London; <https://www.mersey.nhs.uk/media/1839/sexual-orientation-a-practical-guide-for-the-nhs.pdf>
- National Health Service (NHS). 2019a. Service specification: Gender Identity Services for Adults (Surgical Interventions). <https://www.england.nhs.uk/wp-content/uploads/2019/12/nhs-england-service-specification-gender-identity-surgical-services.pdf>
- National Health Service (NHS). 2019b Service specification: Gender Identity Services for Adults (Non-Surgical Interventions). <https://www.england.nhs.uk/wp-content/uploads/2019/07/service-specification-gender-dysphoria-services-non-surgical-june-2019.pdf>
- Needham, B.L., & Austin. E.L. 2010. “Sexual Orientation, Parental Support, and Health

During the Transition to Young Adulthood.” *Journal of Youth and Adolescence*, 39(10):1189–98. <https://doi.org/10.1007/s10964-010-9533-6>

- O’Cleirigh, C., Elsesser, S.A., King, D., Ehlinger, P.P., Bradford, J.B., Grasso, C. & Mayer, K.H. 2018. “Characteristics and Correlates of Tobacco Use in a Community Sample of Sexual Minority Men and Women: Implications for Smoking Cessation Program Development.” *LGBT Health* 5(3):197–202. <https://doi.org/10.1089/lgbt.2016.0157>
- Oakbrook Terrace, 2010. Advancing Effective Communication, Cultural Competence, and Patient- and Family-Centered Care: A Roadmap for Hospitals. IL: The Joint Commission. <https://www.jointcommission.org/-/media/tjc/documents/resources/patient-safety-topics/health-equity/aroaddmapforhospitalsfinalversion727pdf.pdf?db=web&hash=AC3AC4BED1D973713C2CA6B2E5ACD01B>.
- Pachankis, J. E., McConocha, E.M., Reynolds, J.S., Winston, R., Adeyinka, O., Harkness, A., Burton, C.L., Behari, K., Sullivan, T.J., Eldahan, A.I., Esserman, D.A., Hatzenbuehler, M.L., & Safren, S.A. 2019. “Project ESTEEM Protocol: A Randomized Controlled Trial of an LGBTQ-Affirmative Treatment for Young Adult Sexual Minority Men’s Mental and Sexual Health.” *BMC Public Health*, 19(1):1086. <https://doi.org/10.1186/s12889-019-7346-4>
- Palefsky, J.M., Giuliano, A.R., Goldstone, S., Moreira, E.D., Aranda, C., Jessen, H., Hillman, R., Ferris, D., Coutlee, F., Stoler, M.H., Marshall, J.B., Radley, D., Vuocolo, S., Haupt, R.M., Guris, D. & Garner, E.I.O. 2011. “HPV Vaccine against Anal HPV Infection and Anal Intraepithelial Neoplasia.” *New England Journal of Medicine*, 365(17):1576–85. <https://doi.org/10.1056/NEJMoa1010971>
- Pariser, J.J. & Kim, N. 2019. Transgender vaginoplasty: techniques and outcomes. *Translational andrology and urology*, 8(3), 241–247. <https://doi.org/10.21037/tau.2019.06.03>
- Parker, L.L., & Harriger, J.A. 2020. “Eating Disorders and Disordered Eating Behaviors in the LGBT Population: A Review of the Literature.” *Journal of Eating Disorders*, 8(1):51. <https://doi.org/10.1186/s40337-020-00327-y>
- Parsons, J.T., Christian Grov, C. & Golub, S.A. 2012. “Sexual Compulsivity, Co-Occurring Psychosocial Health Problems, and HIV Risk Among Gay and Bisexual Men: Further Evidence of a Syndemic.” *American Journal of Public Health*, 102(1):156–62. <https://doi.org/10.2105/AJPH.2011.300284>
- Patterson, J.G. & Jabson, J.M. 2018. “Sexual Orientation Measurement and Chronic Disease Disparities: National Health and Nutrition Examination Survey, 2009–2014.” *Annals of Epidemiology* 28(2):72–85. <https://doi.org/10.1016/j.annepidem.2017.12.001>
- Perovic S.V. & Djordjevic M.L. 2003. Metoidioplasty: a variant of phalloplasty in female transsexuals. *BJU Int.* Dec;92(9):981-5. <https://doi.org/10.1111/j.1464-410x.2003.04524.x>
- Pettigrew T.F. & Tropp, L.R. 2006. A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5):751-783.
- Poudrier, G., Nolan, I. T., Cook, T. E., Saia, W., Motosko, C. C., Stranix, J. T., Thomson, J. E., Gothard, M. D., & Hazen, A. (2019). Assessing Quality of Life and Patient-Reported Satisfaction with Masculinizing Top Surgery: A Mixed-Methods Descriptive Survey Study. *Plastic and reconstructive surgery*, 143(1), 272–279. <https://doi.org/10.1097/PRS.0000000000005113>
- Puckett, J.A., Newcomb, M.E., Ryan, D.T., Swann, G., Garofalo, R. & Mustanski, B. 2017. “Internalized Homophobia and Perceived Stigma: A Validation Study of Stigma Measures in a Sample of Young Men Who Have Sex with Men.” *Sexuality Research and Social Policy*, 14(1):1–16. <https://doi.org/10.1007/s13178-016-0258-5>
- Puechl, A. M., Russell, K. & Gray, B.A. 2019. “Care and Cancer Screening of the Transgender Population.” *Journal of Women’s Health*, 28(6):761–68. <https://doi.org/10.1089/jwh.2018.6945>
- Quinn, G. P., Sanchez, J.A., Sutton, S.K., Vadaparampil, S.T., Nguyen, G.T., Green, B.L., Kanetsky, P.A. & Schabath, M.B. 2015. “Cancer and Lesbian, Gay, Bisexual, Transgender/Transsexual, and

Queer/Questioning (LGBTQ) Populations: Cancer and Sexual Minorities.” *CA: A Cancer Journal for Clinicians*, 65(5):384–400. <https://doi.org/10.3322/caac.21288>

- Richards, C. & Barrett, J. 2013. The case for bilateral mastectomy and male chest contouring for the female-to-male transsexual. *Annals of the Royal College of Surgeons of England*, 95(2), 93–95. <https://doi.org/10.1308/003588413X13511609957290>.
- Robinson, K., Galloway, K. Bewley, S. & Meads, C. 2017. “Lesbian and Bisexual Women’s Gynaecological Conditions: A Systematic Review and Exploratory Meta-analysis.” *BJOG: An International Journal of Obstetrics & Gynaecology*, 124(3):381–92. <https://doi.org/10.1111/1471-0528.14414>
- Rosario, M., Hunter, J., Maguen, S., Gwadz, M., Smith, R. 2001. The coming-out process and its adaptational and health-related associations among gay, lesbian, and bisexual youths: stipulation and exploration of a model. *Am J Community Psychol.*, 29(1):133-60.). <https://doi.org/10.1023/A:1005205630978>
- Rosser, B. R.S., Merengwa, E., Capistrant, B.D., Iantaffi, A., Kilian, G., Kohli, N., Konety, B.R., Mitteldorf, D. & West, W. 2016. “Prostate Cancer in Gay, Bisexual, and Other Men Who Have Sex with Men: A Review.” *LGBT Health*, 3(1):32–41. <https://doi.org/10.1089/lgbt.2015.0092>
- Royal College of Nursing and UNISON. Not ‘Just’ a Friend: Best Practice Guidance on healthcare for Lesbian, Gay and Bisexual Service Users and Their Families. London, UK: Royal College of Nursing and UNISON; 2004.
- Ryan, C., Huebner, D., Diaz, R.M. & Sanchez, J. 2009. “Family Rejection as a Predictor of Negative Health Outcomes in White and Latino Lesbian, Gay, and Bisexual Young Adults.” *Journal of Adolescent Health*, 56(5):571–73. <https://doi.org/10.1016/j.jadohealth.2014.12.015>
- Sandfort, T. G. M., de Graaf, R., ten Have, M., Ransome, Y. & Schnabel, P. 2014. “Same-Sex Sexuality and Psychiatric Disorders in the Second Netherlands Mental Health Survey and Incidence Study (NEMESIS-2).” *LGBT Health*, 1(4):292–301. <https://doi.org/10.1089/lgbt.2014.0031>
- Schattner A. (2015). Curiosity. Are you curious enough to read on?. *Journal of the Royal Society of Medicine*, 108(5), 160–164. <https://doi.org/10.1177/0141076815585057>.
- Schwinn, T.M., Thom, B., Schinke, S.P. and Hopkins, J. 2015. “Preventing Drug Use Among Sexual-Minority Youths: Findings From a Tailored, Web-Based Intervention.” *Journal of Adolescent Health*, 56(5):571–73. <https://doi.org/10.1016/j.jadohealth.2014.12.015>
- Seamont MMH, (2018) Becoming "The Man I Want to Be": Transgender Masculinity, Embodiment, and Sexuality.
- Selvaggi G, Monstrey S, Ceulemans P, T'Sjoen G, De Cuypere G, Hoebeke P. 2007. Genital sensitivity after sex reassignment surgery in transsexual patients. *Ann Plast Surg.* 58(4):427-33. <https://doi.org/10.1097/01.sap.0000238428.91834.be>.
- Selvaggi G. 2020. Mastectomy in Trans Men. In: Cordova A., Innocenti A., Toia F., Tripoli M. (eds) *Plastic and Cosmetic Surgery of the Male*, Breast. Springer, Cham. https://doi.org/10.1007/978-3-030-25502-2_17
- Semlyen, J., King, M., Varney, J. & Hagger-Johnson, G. 2016. “Sexual Orientation and Symptoms of Common Mental Disorder or Low Wellbeing: Combined Meta-Analysis of 12 UK Population Health Surveys.” *BMC Psychiatry* 16(1):67. <https://doi.org/10.1186/s12888-016-0767-z>
- Sequeira G. M., Chakraborti C., & Panuntim B. A. (2012). Integrating Lesbian, Gay, Bisexual, and Transgender (LGBT) Content Into Undergraduate Medical School Curricula: A Qualitative Study. *Ochsner J.*12(4):379-82.
- Shearer, A., Russon, J., Herres, J., Atte, T., Kodish, T. & Diamond, G. 2015. “The Relationship between Disordered Eating and Sexuality amongst Adolescents and Young Adults.” *Eating Behaviors* 19:115–19. <https://doi.org/10.1016/j.eatbeh.2015.08.001>
- Shepherd A, Hanckel B. & Guise A. 2019. Trans health and the risks of inappropriate curiosity The

- BMJ Opinion. <https://blogs.bmj.com/bmj/2019/09/09/trans-health-and-the-risks-of-inappropriate-curiosity>
- Siever, M.D. 1994. "Sexual Orientation and Gender as Factors in Socioculturally Acquired Vulnerability to Body Dissatisfaction and Eating Disorders." *Journal of Consulting and Clinical Psychology*, 62(2):252–60. <https://doi.org/10.1037/0022-006X.62.2.252>.
 - Silverberg, M.J., Lau, B., Achenbach, C.J., Jing, Y., Althoff, K.N., D'Souza, G., Engels, E.A., Hessol, N.A., Brooks, J.T., Burchell, A.N., Gill, M.J., Goedert, J.J., Hogg, R., Horberg, M.A., Kirk, G.D., Kitahata, M.M., Korthuis, P.T., Mathews, W.C., Mayor, A., Modur, S.P., Napravnik, S., Novak, R.M., Patel, P., Rachlis, A.R., Sterling, T.R., Willig, J.H., Justice, A.C., Moore, R.D., Dubrow, R. 2015. "Cumulative Incidence of Cancer Among Persons With HIV in North America: A Cohort Study." *Annals of Internal Medicine*, 163(7):507. <https://doi.org/10.7326/M14-2768>
 - Singer, M. & Clair, S. 2003. "Syndemics and Public Health: Reconceptualizing Disease in Bio-Social Context." *Medical Anthropology Quarterly*, 17(4):423–41. <https://doi.org/10.1525/maq.2003.17.4.423>
 - Steffens, M.C., & Wagner, C. 2004. Attitudes Toward Lesbians, Gay Men, Bisexual Women, and Bisexual Men in Germany. *Journal of Sex Research*, 41(2), 137–149. <https://doi.org/10.1080/00224490409552222>
 - Stevens, P., Carlson, L.M. & Hinman J.M. 2004. "An Analysis of Tobacco Industry Marketing to Lesbian, Gay, Bisexual, and Transgender (LGBT) Populations: Strategies for Mainstream Tobacco Control and Prevention." *Health Promotion Practice* 5(3_suppl):129S-134S. <https://doi.org/10.1177/1524839904264617>
 - Swannell, S., Martin, G. & Page, A. 2016. "Suicidal Ideation, Suicide Attempts and Non-Suicidal Self-Injury among Lesbian, Gay, Bisexual and Heterosexual Adults: Findings from an Australian National Study." *Australian & New Zealand Journal of Psychiatry*, 50(2):145–53. <https://doi.org/10.1177/0004867415615949>
 - Szél, Zs., Kiss, D., Török, Zs., & Gyarmathy, V.A. (2020). Hungarian Medical Students' Knowledge About and Attitude Toward Homosexual, Bisexual, and Transsexual Individuals. *J.Homosex.* 67(10), 1429-1446.
 - The Fenway Institute. 2016. Providing Inclusive Services and Care for LGBT People: A Guide for healthcare Staff. <https://www.lgbtqihealtheducation.org/publication/learning-guide/>
 - Tomlins L. 2019. Prescribing for transgender patients. *Australian prescriber*, 42(1), 10–13. <https://doi.org/10.18773/austprescr.2019.003>
 - Unger C.A. 2016. Hormone therapy for transgender patients. *Translational andrology and urology*, 5(6), 877–884. <https://doi.org/10.21037/tau.2016.09.04>.
 - Unger, C.A. 2014. "Care of the Transgender Patient: The Role of the Gynecologist." *American Journal of Obstetrics and Gynecology*. 210(1):16–26. <https://doi.org/10.1016/j.ajog.2013.05.035>
 - van de Grift TC, Kreukels BP, Elfering L, Özer M, Bouman MB, Buncamper ME, Smit JM, Mullender MG. 2016. Body image in transmen: multidimensional measurement and the effects of mastectomy. *J Sex Med*. 13(11):1778–1786. <https://doi.org/10.1016/j.jsxm.2016.09.003>
 - Vogel, E.A., Ramo, D.E., Meacham, M.C., Prochaska, J.J., Delucchi, K.L. and Humfleet, G.L. 2020. "The Put It Out Project (POP) Facebook Intervention for Young Sexual and Gender Minority Smokers: Outcomes of a Pilot, Randomized, Controlled Trial." *Nicotine & Tobacco Research* 22(9):1614–21. <https://doi.org/10.1093/ntr/ntz184>
 - Ward, Brian W., Sarah S. Joestl, Adena M. Galinsky, & James M. Dahlhamer. 2015. "Selected Diagnosed Chronic Conditions by Sexual Orientation: A National Study of US Adults, 2013." *Preventing Chronic Disease* 12:150292. <https://doi.org/10.5888/pcd12.150292>
 - Watson, R.J., Veale, J.F. and Saewyc, E.M. 2017. "Disordered Eating Behaviors among Transgender Youth: Probability Profiles from Risk and Protective Factors: DISORDERED EATING BEHAVIORS AMONG TRANSGENDER YOUTH." *International Journal of Eating Disorders*, 50(5):515–22. <https://doi.org/10.1002/eat.22627>
 - Weyers, S., De Sutter, P., Hoebeke, S., Monstrey, G., 'T Sjoen, G., Verstraelen, H., Gerris, J. (2010). Gynaecological aspects of the treatment and follow-up of transsexual men and women. Facts, views & vision in ObGyn, 2(1), 35–54.
 - World Professional Association for Transgender Health. 2012. Standards of Care for the Health of Transsexual, Transgender, and Gender-Conforming People [7th Version]. <https://www.wpath.org/publications/soc>
 - Wu, L, Sell, R.L., Roth, A.M. & Welles, S.L. 2018. "Mental Health Disorders Mediate Association of Sexual Minority Identity with Cardiovascular Disease." *Preventive Medicine*, 108:123–28. <https://doi.org/10.1016/j.ypmed.2018.01.003>
 - Yarchoan, R., & Uldrick T.S. 2018. "HIV-Associated Cancers and Related Diseases" edited by D. L. Longo. *New England Journal of Medicine*, 378(11):1029–41. <https://doi.org/10.1056/NEJMra1615896>
 - Zaritsky, E. & Dibble, S.L. 2010. "Risk Factors for Reproductive and Breast Cancers among Older Lesbians." *Journal of Women's Health* 19(1):125–31. <https://doi.org/10.1089/jwh.2008.1094>
 - Zeeman, Laetitia, & Kay Aranda. 2020. "A Systematic Review of the Health and Healthcare Inequalities for People with Intersex Variance." *International Journal of Environmental Research and Public Health*, 17(18):6533. <https://doi.org/10.3390/ijerph17186533>

Chapter 5. – Special issues

5

5.1) Group specifications

5.1.1.) Transgender-specific health issues

As a result of several trans activists' and mental health professionals' criticism of DSM's and ICD's stigmatizing, pathologizing view on transgender identities, though ICD11's current edition still contains diagnosis for "Gender Incongruence", it has been removed from mental disorders, and is discussed in a different chapter, called "Conditions related to sexual health" (WHO – ICD-11 for Mortality and Morbidity Statistics 11, 2021; APA, 2017; Rodríguez, Granda and González, 2018). Therefore, trans patients can seek medical support or help in transition without some of the stigmatisation caused by medicalisation (Rodríguez, Granda and González, 2018).

5.1.1.a) Mental health in general

Although several trans activists and physicians opposed it because it stigmatises and pathologises transgender identities, DSM 5 (Diagnostic and Statistical Manual of Mental Disorders) still contains a diagnosis for "Gender Incongruence" which suggests that it is a mental disorder(WHO

– ICD-11 for Mortality and Morbidity Statistics 11, 2021; APA, 2017; Rodríguez, Granda and González, 2018). The reason given for this decision was to facilitate access to care (Rodríguez, Granda and González, 2018).

DSM 5 uses these diagnostic criteria for adults/ adolescents and for children:

In adolescents and adults, at least two of the following conditions should exist for at least six months for diagnosis of gender dysphoria to be given:

1. A marked incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics
2. A strong desire to be rid of one's primary and/or secondary sex characteristics
3. A strong desire for the primary and/or secondary sex characteristics of the other gender
4. A strong desire to be of the other gender
5. A strong desire to be treated as the other gender
6. A strong conviction that one has the typical feelings and reactions of the other gender

Whereas in the case of children, distress and functional disorders must be associated with two of the following requirements in order to assign a diagnosis, and the conditions must last for at least half a year:

1. A strong desire to be of the other gender or an insistence that one is the other gender
2. A strong preference for wearing clothes typical of the opposite gender
3. A strong preference for cross-gender roles in make-believe play or fantasy play
4. A strong preference for the toys, games or activities stereotypically used or engaged in by the other gender
5. A strong preference for playmates of the other gender
6. A strong rejection of toys, games and activities typical of one's assigned gender
7. A strong dislike of one's sexual anatomy
8. A strong desire for the physical sex characteristics that match one's experienced gender

These criteria and the pathologizing approach do not satisfy the requirements of patient-centered care and are not supportive for gender nonconforming youth and their families.

5.1.1.b) Mental health of transgender youth

Supporting children and adolescents with transgender identities must include providing a safe environment for children to express their gender identity without being humiliated, abused or rejected (James et al. 2015; Aramburu, 2016). Mental health professionals can assist parents in developing reassuring options for the child in the aim of exploring experiences of living in another gender role (eg: cross-dressing during holidays, using the preferred name and pronouns at home) and to continuously expand the circumstances of living according to preferred gender along with the needs of the child. If the

parents or caregivers are not willing to cooperate and behave dismissively, health professionals should explain to them the adverse effects of rejection and negative attitudes on their child's mental and physical health.

Mental health professionals should:

1. not dismiss, criticise, or judge nonconforming gender identities.
2. be open for non-binary gender identities.
3. support the child by using the correct pronouns.
4. maintain a safe and supportive environment during encounters.
5. be present as an ally and educate their young clients and their families about the therapeutic options.
6. conduct a comprehensive evaluation of the child's and the family's functioning and difficulties (strengths and weaknesses of emotional functioning, the child's peer and other social connections, the child's intellectual functioning).
7. inform patients and their caregivers about the possibilities and limitations of accessible treatments.
8. support the family and the child in managing uncertainty and anxiety.
9. help the family and the child in communicating and managing the transition with their community and institutions (e.g., school or registry office).

(WPATH – SOC7 2012; Benestad 2009; Jones et al. 2019)

Interventions for children and adolescents

According to the WPATH the Following Criteria for Puberty-Suppressing Hormones must be met:

1. “The adolescent has demonstrated a long-lasting and intense pattern of gender nonconformity or gender dysphoria (whether suppressed or expressed);

2. Gender dysphoria emerged or worsened with the onset of puberty;
3. Any coexisting psychological, medical, or social problems that could interfere with treatment (e.g., that may compromise treatment adherence) have been addressed, such that the adolescent's situation and functioning are stable enough to start treatment;
4. The adolescent has given informed consent and, particularly when the adolescent has not reached the age of medical consent, the parents or other caretakers or guardians have consented to the treatment and are involved in supporting the adolescent throughout the treatment process.“ (WPATH – SOC7 2012; Hembree et al. 2009)

1. Fully reversible interventions. The usage of suppressing hormones for reducing the effect of oestrogen or testosterone with the aim of delaying the physical changes in secondary sex characteristics in puberty. Progestins or other medications (such as spironolactone) also decrease androgen secretion. Continuous oral contraceptives or depot injections can be used in order to suppress menstrual cycles. Puberty-delaying hormones (such as gonadotropin-releasing hormone [GnRH] analogs) are available – after a proper and long-run psychological evaluation – as a medical intervention in some countries, with advantageous effects on mental health of trans youth, and they are seen as life-saving interventions, although the long-term consequences are still relatively unknown (de Vries et al. 2014; et al. Chew 2018; Rew et al. 2021; Biggs 2020). However, Rew highlights in her review that puberty blockers have long been used in the case of precocious puberty as standard of care with rare adverse physical and psychological effects (Rew et al. 2021). Mood swings, emotional instability, and changes in body composition (increased fat, decreased body mass, bone turnover, and height velocity) were reported as side-effects (Chew et al. 2018; Rew et al. 2021). Puberty blockers maintain Tanner stage II. for allowing more time to monitor gender identity

development without the increasing anxiety and dysphoria that accompanies the development of sex characteristics. The Endocrine Society Clinical Practice Guideline states that a paediatric endocrinologist should closely monitor the process of hormonal suppression in order to follow up on the patient's development and prevent side effects (deviation in height, and lower bone density) (Hembree et al. 2009).

2. Partially reversible interventions. The usage of hormones in aim of feminising or masculinizing the physical appearance and other characteristics. Some of these interventions, such as virilisation and gynecomastia, can only be restored by surgeries.

3. Irreversible interventions. These are surgical procedures in order to modify the genitals or change the appearance. Genital surgery should only be performed if the patient has lived according to the congruent gender for at least a year, and when they have reached the age of majority. For female-to-male patients, chest surgery might be carried out earlier, after one year of testosterone treatment.

(Hembree et al. 2009; WPATH – SOC7, 2012)

5.1.1.c) Adult trans individuals

Several studies have indicated clinically significant levels of anxiety and depression, and increased distrust of other people in transgender adults; they are also more likely to report suicidal ideation and attempts, to take psychotropic medications, and to struggle with problematic drinking (Institute of Medicine, (US) 2011; Mathy, Lehmann and Kerr 2003. Suicidal ideation is high among trans people, and it is more likely to be reported by trans men than trans women, though trans women are more likely to attempt suicide (Xavier 2000; Haas, Rodgers and Herman 2014; Adams and Vincent 2019; Peterson et al. 2017).

The recommendation for standards of care for trans individuals published by the **World Professional Association for Transgender Health** (WPATH) is available in 18 languages. The standard of care provides guidance from professionals based on the current literature, knowledge and clinical experiences in the assessment and treatment for trans people. However, as we highlighted in previous chapters, medical discourse about trans people and the transition itself is often pathologizing and medicalising. Therefore, medical and psychological guides and standards in connection with trans identities should be approached more critically. We must strive to establish a dialogue with our trans patients, and to subject ourselves to self-examination in connection with our prejudice and paternalistic ways of speaking about and treating our trans patients. We should apply a more accepting and affirming attitude and communication for the sake of our trans patients' mental (and physical) well-being. We must take some steps toward cultural humility and reflect on our privileges and our power given by our status as professionals.

Trans individuals should be provided trans-specific mental healthcare in an affirmative manner with the aim of reducing their mental health difficulties, and their risk for suicide.

Mental health professionals should assess the patient's history of distress in connection with their sex assigned at birth, the presence or absence of supporting relationships, the effects of experienced social attitudes, stigma, discrimination and normalisation as well as their general mental health status. Medical and mental health professionals should estimate their patients' resources and abilities for coping with their stigmatised identities. Providers should also evaluate their patients' opportunities to apply constructive coping mechanisms and provide information about supportive services.

With adequate support and information given, transgender adults should have the opportuni-

ty to access interventions (e.g.: surgery or hormone therapy) in order to reduce their distress caused by the mismatch in their gender identity and sex characteristics.

Hormone therapy for adults

Professionals should encourage, guide, and assist their patients in providing fully informed consent and preparing for hormone therapy, and rule out any significant coexisting mental health concerns. If the patient so wishes, reproductive options should also be discussed before initiating hormone therapy.

Trans individuals who undergo gender affirming treatment are in most cases satisfied, regrets or intentions to reverse the procedure are extremely rare, which also reinforces the fact that a patient-centered approach and the respect for patient agency is important and expedient in the case of caring for trans patients, therefore paternalistic, medicalizing procedures are not required (Lawrence 2003; van de Grift et al. 2018). Family or social support, psychological preparedness, and positive surgical experience without complications are predictors of good health outcomes for transgender individuals after surgery (Lawrence 2003; Papadopoulos 2017; van de Grift 2018).

Trans people require postoperative care (including prescribed hormones) and follow-up in order to control their long-term health outcomes (Monstrey et al. 2009). Healthcare professionals need to draw patients' attention to necessity and desirability of continuous care: the monitoring of the short- and long-term effects of interventions (gonadectomy, other surgeries and/or the long-term, high-dose hormone therapy), the need of recommended screening tests aligned with the guidelines, and other benefits of effective follow-up. The purpose of the postoperative follow-up process is to prevent adverse side effects, perform specific screening, and treat any conditions or diseases in connection with the patient's

hormonal or surgical treatment. Post-treatment care should be a teamwork including the surgeon, the endocrinologist, the general practitioner and the mental health provider or psychotherapist who took part in a therapeutic team in order to support the patient.

The prostate is not removed during vaginoplasty, therefore trans women should be screened for prostate hyperplasia and tumours. A PSA screening is not necessary routinely for trans women, as PSA levels can be low due to the effect of feminising hormones in case of cancer, but it is recommended for high risk patients over the age of 45.

Residual tissues may remain after breast removal surgeries, hence regular chest examination should be performed for trans men (if mammographic screening cannot be done) (Weyers et al. 2011; Burcombe et al. 2003). Transgender patients with intact cervix or after vaginoplasty should be screened for HPV (in every 3-5 years), and vaginal or cervical neoplasia regularly. If the cervix is fully removed and there is no evidence of previous high grade HPV colonisation, there is no need for further screening.

Trans people with intact uterus or ovaries should be screened after hormone therapy with the aim of ruling out PCOS. There is no evidence for a heightened risk of ovarian cancer for trans patients, though nulliparity and genetic mutations can exert their effect, therefore those who have definite risk factors should be screened every 1-3 years. Oophorectomy is suggested if the patient does not wish to maintain fertility, and the surgery is not contraindicated.

Just like in the case of cis women, lower urogenital infections affect trans women more frequently due to the shortened urethra. In some cases, postoperative anatomy does not ensure undisturbed urination, micturination, urinary incontinence and other bladder disorders may occur after surgery (Hoebeke et al. 2005; Kuhn,

Hiltebrand and Birkhaeuser 2007). In other cases, patients do not undertake certain interventions (e.g., vaginectomy) in which case genital complaints, such as pruritus or burning can occur in the vagina due to vaginal dryness; therefore we must delicately draw patients' attention to using lubricants in order to relieve discomfort and prevent infections (Bizic, Kojovic, Duisin, Stanojevic, Vujovic, Milosevic, Korac, and Djordjevic, 2014; Meltzer 2016).

Primary care physicians should be able to provide proper care of their trans patients who have a surgical history and/or hormone therapy. GPs need to be aware of the most common physical health issues in connection with the transition in order to be able to refer the patient to the appropriate specialist if necessary.

An inadequate follow-up process can result in underserving the patients and leaving preventable adverse health effects or early stages of cancers to be undiagnosed; at the same time, over-screening can lead to unnecessary interventions and high costs for the healthcare system.

Some interventions or examinations can be physically or emotionally cumbersome for some trans or non-binary people, especially in the case of examinations of the external or internal genitalia or the urogenital system.

Sexual functioning

Sexual and reproductive health among transgender individuals also has some unique considerations. Hormone therapy may have an effect on fertility, although little research has been conducted on the reproductive health needs of this population. Transgender people may struggle with problems in sexual functioning: both transgender women and men have reported sexual arousal difficulties, lower sexual desire, and difficulties with orgasmic ability (Institute of Medicine (US), 2011).

Feminizing hormones are expected to lower sexual desire, but no evidence has been presented to confirm this; at the same time, masculinizing hormone therapy increases sexual arousal and orgasmic ability (Klein and Gorzalka 2009). Surgical procedures and techniques have been improved, resulting in better after-surgery orgasmic ability for both trans men and trans women (Garcia 2018; Selvaggi et al. 2007; Lawrence 2005). In case of both male HRT and vaginoplasty we should draw patients' attention on ensuring proper lubrication on a daily basis, and especially when having vaginal sexual intercourse, because both male HRT and vaginoplasty is associated with vaginal dryness, therefore artificial lubrication is important in order to prevent tissue damage and infections (Bizic, Kojovic, Dui-sin, Stanojevic, Vujovic, Milosevic, Korac, and Djordjevic, 2014; Meltzer 2016).

5.1.1.d) Caring for trans elderly

Trans people may delay transition with the aim of avoiding discrimination in employment and their everyday life. They might choose not to come out as trans for decades, they may have spent decades in the closet or subjected to stigmatisation and discrimination (Porter et al. 2016). We must keep in mind that if hormone therapy is started at a late age, it will be less effective, and the basic health status of the elderly may affect prescribability. Still some studies indicate that hormone therapy started at a late age has a beneficial effect on the lives of trans people (Lawrence 2003; Porter et al. 2016). Elderly trans individuals often have been previously married or have had children, therefore just like for trans children, in their case we might have to pay more attention to the support of their family (Persson 2009; Porter et al. 2016).

When caring for trans older adults, we also should be aware that they tend to be less supported by their family, might be isolated from their loved ones, they are more likely to be

unemployed, therefore they are more likely to live alone and in inadequate housing. Having adequate knowledge of the country-specific drug financing system is also important when we are caring for older trans people, as in some countries hormone therapy for trans people is not or just minimally supported by the health insurance system, which further worsens the situation of elderly trans people.

5.1.2.) Intersex-specific health issues

Intersex bodies are in principle physically healthy. Intersex variations as an umbrella term is used to describe people living with congenital, atypical chromosomal, hormonal and/or anatomical sex traits, therefore we must keep in mind that it is a diverse group. There are also huge differences in how the medical profession uses the term "intersex" and how it groups intersex variations (Jones 2018). Tartaglia and colleagues highlight in their study that results from early studies on sex chromosome trisomies must be handled with caution, because of their low sample size, cross-sectional method, sampling and ascertainment biases (due to the tendency that only severe cases of SCTs were recognised before genetic testing were available), and because treatment trials also often lack randomised control and blinded settings (Tartaglia, Howell, Davis. Kowal, Tanda, Brown, Boada, Alston, Crawford, Thompson, van Rijn, Wilson, Janusz and Ross, 2020). These methodological issues appeared previously also in a study by Pieters and colleagues (Pieters, Kooper, van Kessel, Braat and Smits, 2011). Based on the reasons above, some of these findings cannot be generalised for the whole intersex population.

Being intersex or having an intersex variation does not mean that the body is dysfunctional. Some mental or physical health issues of intersex individuals are related to their intersex varia-

tion, or the treatments they have received, while others are independent from it. We should also take into account that degrading intersexuality to a mere diagnosis and medicalizing intersex variations has a profound negative effect on intersex people's mental and physical health, it affects their individual and social identities and possibilities, their connections and social relations (Knight 2017; Amnesty International 2017; GrApSIA 2015).

5.1.2.a) Mental health

The medical profession has considered people with intersex bodies unable to integrate into society, therefore intersex infants, children, and youth are often subjected to unnecessary and irreversible sex determining surgeries (Jones et al. 2019). Children are usually able to categorise their own gender by the age of 3, and gender identity becomes relatively consistent by the age of 6, although we should notice that fluidity or variance can still occur later in some cases. Intersex individuals often feels uneasy due to a mismatch between their sex assigned at birth and their gender: women with complete androgen insensitivity syndrome and congenital adrenal hyperplasia who have been raised according to female gender norms experience these difficulties less frequently, while children with the most common occurrences of male intersex conditions (impairment in testosterone biosynthesis or in tissue responsiveness to dihydrotestosterone and/or testosterone due to 5a-RD-2 – 5alpha-reductase-2 deficiency or 17b-HSD-3 -17β-hydroxysteroid dehydrogenase-3 deficiency) who were raised as female have a much higher (59% and 39%) prevalence of gender dysphoria (Mendonca et al. 2000; Mains et al. 2008; Cohen-Kettenis 2005).

Unwanted surgeries have severe long-term consequences on intersex individuals' mental and physical health because they cause irreversible physical and psychological harm (Amnesty In-

ternational, 2017; Knight 2017; Bauer and Truffer, 2019). Some intersex people report grief and a sense of loss of autonomy due to these non-consensual sex assignment surgeries, often performed in early childhood. As a consequence of these undesired surgeries (most notably chest surgeries and those that cause scarring) they might feel alienated from themselves and their own bodies (Jones et al. 2019; Knight 2017; GrApSIA and Audí, 2014). Experienced negative attitudes and discrimination cause lower self-esteem and a damaged body image. Intersex people often face societal and medical pressure to resolve their gender identity and adjust to gender norms and binary sex characteristics (Jones 2016; Knight, 2017, Amnesty International, 2017; Bauer and Truffer 2019). This causes severe distress and prevents them from exploring and expressing their own – in some cases non-binary – gender identity. All the factors mentioned above could explain why self-harm, suicidal thoughts and suicide attempts are particularly frequent in the intersex population. Certain medical practitioners in some countries now acknowledge that parents should consider leaving their child's body intact with the aim of preserving the child's autonomy, dignity, sexual function and fertility options (Knight 2017). Although some health facilities still support early surgeries with the aim of providing opportunity for children to “grow up with more normally appearing genitalia” and “minimising parental anxiety”, human rights approaches argue that these kinds of mutilations are unnecessary and should not be considered as therapeutic (Knight 2017; Jones et al. 2019).

In many cases, intersex people are advised by doctors to conceal their intersex condition, which can be a huge burden for both the family and the individual. Parents and caregivers often conceal their children's intersexuality even from the child themselves due to the recommendation or suggestion of doctors (Danon and Krämer 2017). In consequence, some people with intersexual variation receive little or no information about their condition, its progression, and their

options of receiving or rejecting treatment. Informing and supporting patients and their caregivers in connection with intersexual variations is essential. Keeping our patients and their relatives up to date with the continuously developing techniques and treatments is desirable in order to give proper care for intersex youth and ensure the opportunity for both caregivers and the patients themselves to give informed consent and not to regret their decisions about the surgery performed or treatment received.

It is also very important that intersex individuals and their relatives receive appropriate support: we should inform them about the opportunity and benefit of peer support groups and recommend them experienced, affirmative, culturally competent mental health services.

5.1.2.b) Physical health

Physical health issues in connection with the intersex condition itself or as a result of performed surgeries and received treatment should be acknowledged. Some information has already been provided in Chapter 2. (2.2.3 Physical health problems affecting specific groups), therefore in this chapter we would like to focus first on the effects of gonadectomy and the methods and side-effects of hormonal replacement therapies, then we would like to provide some additional informations on the different intersex variations.

Surgery

In the case of intersex variations, two types of surgeries must be mentioned: 1) normalising surgeries of the external genitals and 2) gonadectomy.

The first group of surgeries (normalizing surgeries) includes several techniques or procedures (e.g., vaginoplasty, labiaplasty, clitoral reduction surgeries, phalloplasty, scrotoplasty, and urethroplasty) in order to produce anatomy which is

better suited to the expected external genitalia / typical male / female sex characteristics (Zhang, Pan, Ji, Wang, Shen, Liu, Lu, and Zhou, 2013; Creighton 2001; Bauer and Truffer 2019; Zeeman and Aranda 2020). These surgeries are justified by supporting better psychosocial adaptation, although many medical and civil reports draw attention to their detrimental effects (e.g., scarring, trauma, incontinence, decrease or loss of sexual sensation, lifelong hormone replacement therapy and its side-effects) (GrApSIA and Audí, 2014; Zeeman and Aranda, 2020; Knight 2017; Bauer and Truffer, 2019; Amnesty International, 2017). Normalizing surgeries on young intersex children before they could declare their gender identity involve the risk of assigning the wrong sex (Zeeman and Aranda, 2020; Knight 2017; Bauer and Truffer, 2019; Amnesty International, 2017).

The second group involves the removal of the testicles, ovaries, ovotestes or streak gonads. The most widespread argument for gonadectomy is the assumed elevated risk for certain gonadal malignities, though current research challenges the necessity for gonadectomy, and promotes watchful waiting (screening and follow-up) (Knight, 2017; Dicken, Billmire, Krailo, Xia, Shaikh, Cullen, Olson, Pashankar, Malogolowkin, Amatruda, Rescorla, Egler, Ross, Rodriguez-Galindo and Frazier, 2018; Huang, Wang and Tian, 2017; Looijenga, Hersmus, Oosterhuis, Cools, Drop and Wolffenbuttel, 2007; Slowikowska-Hilczer, Szarras-Czapnik, Wolski, Oszukowska, Hilczer, Jakubowski, Walczak-Jedrzejska, Marchlewska, Filipiak, Kaluzewski, Baka-Ostrowska, Niedzielski and Kula, 2015; Kathrins and Kolon, 2016; Lanciotti, Cofini, Leonardi, Bertozzi, Penta, and Esposito, 2019). In order to estimate the actual risk for malignancy and to prevent unnecessary gonadectomies, Cools and colleagues suggest a new categorisation of germ cell tumor risk, which can establish a better background for watchful waiting (proponing gonadectomy as long as possible, but at least until puberty), therefore might preserve the fertility of intersex

people (Cools, Drop, Wolffenbuttel., Oosterhuis and Looijenga, 2006; Looijenga, Hersmus, Oosterhuis, Cools, Drop and Wolffenbuttel, 2007; Knight 2017; Parliament of Australia 2012).

Surgeries performed with informed consent and with the aim of affirming the assigned gender in alignment with the individual's wish, or as well as hormonal balance caused by medication can be considered as positive health outcomes, but we must notice that several mental and physical health risks are related to early surgical treatments, often carried out without consent, and the follow-up hormone replacement therapy is given in order to moderate the effects of gonadectomy and castration.

Certain medical practitioners in some countries now acknowledge that parents should consider leaving their child's body intact with the aim of preserving the child's autonomy, dignity, sexual function and fertility options (Knight 2017). Although some health facilities still support early surgeries with the aim of providing opportunity for children to "grow up with more normal-appearing genitalia" and "minimising parental anxiety", human rights approaches argue that these kinds of mutilations are unnecessary and should not be considered as therapeutic (Knight 2017; Jones et al. 2019).

Hormone replacement therapy

Hormone replacement therapy (HRT) is mandatory after bilateral gonadectomy in order to replace hormone production in the gonadal tissue and thus ensure pubertal development and psychological and relational/sexual wellness, maintain secondary sexual features and prevent other health-threatening side effects of hypogonadism such as osteomalacy and osteoporosis. The choice of medication form should be guided by the patient's needs and preference. HRT differs depending on the time of the gonadectomy.

Testosterone (or other androgen therapy) can be

administered orally, or both in a transdermal and injectable form (see details in Chapter 4.2.5.) Pharmacology). Usually 8–10 mg/kg testosterone is used for long-term replacement therapy. Testosterone implants (400–800 mg in every 3–6 months), ointments, gels or patches may provide more stable testosterone levels than intramuscular injections; oral testosterone is rarely used.

Oestrogen replacement is available in oral (ethinylestradiol, conjugated equine estrogen, estradiol valerate, estrone), subcutane (estradiol), transdermal (estradiol) or other forms (nasal spray, vaginal cream, pessary). The optimal dose of estrogen for hormone replacement therapy is yet unknown; for the maintenance of bone mineralisation, conjugated equine estrogen 0.625mg; estradiol valerate 2mg; estropipate (piperazine estrone sulfate) 1.25mg are suggested based on studies on postmenopausal women.

Progesteron in order to prevent osteoporosis in women can be administered periodically (medroxyprogesterone 10 mg or dydrogesterone 10mg for 14 days per month). For ensuring amenorrhea, the continuous application of progresterones is recommended.

In the case of decreased bone mineralisation, regular physical activities, as well as increased calcium and vitamin D intake could be considered (Kamoun, Feki, Sfar and Abid, 2013; Warne, Grover and Zajac, 2005).

In summary, health issues in connection with received hormonal treatment and gonadectomy or castration include lower bone density, higher risk for osteoporosis, mood disorders, depression or aggression, weight gain or sexual dysfunction, and increased risk of blood-clotting.

Hormone therapies have their own risks and benefits as we highlighted in Chapter 4. (see Chapter 4.2.5.d) Risks and side effects of hormone therapies). Oestrogen therapy increases the risk of thromboembolic events (myocardial

infarction, stroke, deep vein thrombosis), while increased risk of osteoporosis, cardiovascular diseases, cognitive decline, and Parkinson disease has been reported in the case of oestrogen deficiency (Warne, Grover and Zajac, 2005; Ko, King, Williams, Creighton and Conway, 2017).

Reproductive health

In the case of intersex variations, we should address health issues connected to reproductive health and sexual health due to gonadal dysmorphism and dysfunction, or in some cases early medical interventions applying surgical or chemical sterilisation (Jones et al. 2016; GrApSIA and Audí, 2014). In a large Australian study almost two-third of intersex individuals indicated that their intersex variation or the treatment received had affected their sexual life (Jones 2016). Modern medical technologies can effectively target infertility or support conception if the function and anatomy of the appropriate internal genitals allow it.

Some detailed information on the most common intersex conditions:

(The information below must be carefully and critically handled due to the medicalizing view of intersexual conditions in general and the limited size of the examined population. The following results are presented using medical categories according to a clinical nomenclature which is found to be pathologizing by several people in the intersex community. Performing studies in a more inclusive perspective, taking into account the actual problems and experiences of those who are affected would be necessary / desired.)

Complex hypospadias

Male children with complex hypospadias have a dislocated urethra opening (CDC, 2020). The opening of the urethra might be found on the underside of penis (between the penis and the scrotum, or between the anus and scrotum). 32% of

the children with hypospadias have undescended or missing testicles, 15% have inguinal hernia (Jones and Leonard 2019). Some of the earlier studies suggest that erectile dysfunction, ejaculatory disturbances and urinary tract infections tend to be more common among people with hypospadiasis than in the average population, but a large variance has been shown between the results of the different studies (Urology care foundation 2021; Jones and Leonard 2019; Bubanj, Perovic, Milicevic, Jovcic, Marjanovic and Djordjevic, 2004; Singh, Jayanthi and Gopalakrishnan, 2008). We must also keep in mind that the literature on the sexual health of people living with hypospadiasis is not so wide and also that anejaculation or dissatisfaction with erection might be the mental and physical consequence of previous surgeries (Jones and Leonard, 2017; Örtqvist, Fossum, Andersson, Nordenström, Frisén, Holmdahl and Nordenskjöld, 2017).

Congenital adrenal hyperplasia

This condition develops because the steroid 21-hydroxylase enzyme is missing or ineffective. As a result of this, the secretion of cortisol and aldosterone are inadequate, therefore electrolyte abnormalities or adrenal crisis can potentially occur (Jones and Leonard, 2017; Knight 2017; Speiser, Arlt, Auchus, Baskin, Conway, Merke, Meyer-Bahlburg, Miller, Murad, M. H., Oberfield, and White, 2018). Children with CAH are usually born with atypical genitals (Jones and Leonard, 2017; Knight 2017; Kamoun, Feki, Sfar and Abid, 2013; Papadakis, Kandaraki, Tseniklidi, Papalou and Diamanti-Kandarakis, 2019; Merke and Poppas, 2013). Close attention to electrolyte levels and lifelong mineralocorticoid and glucocorticoid supplements are required (Knight 2017; Merke and Poppas, 2013). For CAH children with an XY genotype there is a higher risk for testicular cancer (Jones and Leonard, 2017; Speiser, Arlt, Auchus, Baskin, Conway, Merke, Meyer-Bahlburg, Miller, Murad, M. H., Oberfield, and White, 2018; Merke and Poppas, 2013; Kamoun, Feki, Sfar and Abid, 2013). In the case of an

XX genotype with irregular menses, dyspareunia and PCOS are more common (Speiser, Arlt, Auchus, Baskin, Conway, Merke, Meyer-Bahlburg, Miller, Murad, M. H., Oberfield, and White, 2018; Kamoun, Feki, Sfar and Abid, 2013). As a result of the treatment, obesity, hypertension, osteopenia, osteoporosis, insulin resistance or metabolic syndrome can develop (Jones and Leonard, 2017, Kamoun, Feki, Sfar and Abid, 2013; Merke and Poppas, 2013). Reduced fertility is typical for both men and women with CAH, especially for those who live with a salt wasting form (Jones and Leonard, 2017; Papadakis, Kandaraki, Tseniklidi, Papalou and Diamanti-Kandarakis, 2019; Kamoun, Feki, Sfar and Abid, 2013). Hormonal imbalances during adolescence might elevate the risks of some co-morbidities (Merke and Poppas, 2013).

Androgen insensitivity syndrome

Individuals with androgen insensitivity have XY chromosomes, but due to the partial (PAIS) or complete (CAIS) insensitivity to androgens (testosterone) they typically have female (CAIS) or atypical (PAIS) sex characteristics (Tyutyusheva, Mancini, Baroncelli, D’Elios, Peroni, D., Meriggiola and Bertelloni, 2021; Jones and Leonard, 2017). The testicles are present, but usually undescended and can be found in the abdominal cavity, in the inguinal canal, or in the labia majora. The uterus, the cervix and the proximal vagina are missing (due to the absent differentiation of the Wolffian structures), and the distal vagina has an average 2.5 to 8 cm length (Tyutyusheva, Mancini, Baroncelli, D’Elios, Peroni, D., Meriggiola and Bertelloni, 2021; Jones and Leonard, 2017; Lanciotti, Cofini, Leonardi, Bertozzi, Penta and Esposito, 2019). AIS patients seem to have a unique hormonal profile which differs from the physiological male or female ones (Lanciotti, Cofini, Leonardi, Bertozzi, Penta and Esposito, 2019; Fallat and Donahoe, 2006). The condition is usually associated with infertility but the actual prevalence or causes cannot be identified due to the widespread presence of early gonadectomy. According to some studies,

people with AIS have normally functioning testes which must be reserved as long as possible in order to provide endogen hormone production (Tyutyusheva, Mancini, Baroncelli, D’Elios, Peroni, D., Meriggiola and Bertelloni, 2021; Fallat and Donahoe, 2006). Patients with androgen insensitivity syndrome might have higher risk for testicular cancer, but in AIS the occurrence of a malignant tumor is unusual before puberty, and there is no consensus among the results (Lanciotti, Cofini, Leonardi, Bertozzi, Penta and Esposito, 2019; Fallat and Donahoe, 2006; Dickson, Billmire, Krailo, Xia, Shaikh, Cullen, Olson, Pashankar, Malogolowkin, Amatruda, Rescorla, Egler, Ross, Rodriguez-Galindo and Frazier, 2018; AI; Looijenga, Hersmus, Oosterhuis, Cools, Drop and Wolffenbuttel, 2007). In the case of our AIS patients we must also pay special attention to the elevated risk of osteopenia and osteoporosis due to androgen resistance and as a major side-effect of gonadectomy (Lanciotti, Cofini, Leonardi, Bertozzi, Penta and Esposito, 2019; Tyutyusheva, Mancini, Baroncelli, D’Elios, Peroni, D., Meriggiola and Bertelloni, 2021; Jones and Leonard, 2017; Bauer and Truffer, 2020). They might experience difficulties during penile-vaginal penetrative sexual intercourse in the case of vaginal shortness or penis-vagina size disproportion (GrApSIA and Audí, 2014). They might also express gender nonconformity, disconnect from or reject the sex assigned at birth (Jones and Leonard, 2017).

Mayer-Rokitansky-Küster-Hauser syndrome (Vaginal agenesis)

People with MRKH have normal external genitals and functional ovaries but the vagina and uterus are underdeveloped or absent. The condition often remains undetected until the onset of primary amenorrhea (Jones and Leonard 2019). Sexual dysfunction (dyspareunia due to the shortness of the vagina), infertility, skeletal and renal abnormalities and heart malformations are more common among individuals affected by this syndrome (Medline Plus 2017; Jones and Leonard 2019).

Triple X syndrome (47XXX)

The Triple X syndrome is the most common sex chromosome aneuploidy among women (Skuse, Printzlau and Wolstencroft, 2018; Jones and Leonard 2017). In physical appearance, tall stature, clindodactyly and infant hypotonia as minor physical characteristics can be present (Tartaglia, Howell, Sutherland, Wilson and Wilson, 2010; Jones and Leonard 2017; Skuse, Printzlau and Wolstencroft, 2018). They are occasionally affected by congenital heart abnormalities (coarctation aortae, pulmonal stenosis, septal defects), diseases of the kidney and urinary tract, ovarian malformations and premature menopause (Tartaglia, Howell, Sutherland, Wilson and Wilson, 2010; Skuse, Printzlau and Wolstencroft, 2018; Tartaglia, Howell, Davis. Kowal, Tanda, Brown, Boada, Alston, Crawford, Thompson, van Rijn, Wilson, Janusz and Ross, 2020). Women with a triple X syndrome might have increased risk of learning disabilities, behavioural and emotional difficulties and delayed development of speech, language and motor skills (Tartaglia, Howell, Sutherland, Wilson and Wilson, 2010; Hutaff-Lee, Cordeiro and Tartaglia, 2013; Skuse, Printzlau and Wolstencroft, 2018, Van Rijn 2019).

Klinefelter syndrome (47XXY)

Klinefelter syndrome is one of the most common intersex variations. It usually remains undetected until a later age, and two-thirds of the cases are never identified (Jones and Leonard 2017; Skuse, Printzlau and Wolstencroft, 2018). Relative deficits in executive functions, working memory and in some domains of social attention, learning and language difficulties are more common among people with this intersex variation (Jones and Leonard 2017; Ross, Roeltgen, Stefanatos, Benecke, Zeger, Kushner, Ramos, Elder and Zinn, 2008; Van Rijn 2019; Skakkebaek, Moore, Pedersen, Bojesen, Kristensen, Fedder, Laurberg, Hertz, Østergaard, Wallentin M. and Gravholt, 2017). According to some results, people with Klinefelter syndrome usually have small testi-

cles and primary testicular insufficiency, therefore they might have reduced fertility. They have higher risk for metabolic syndrome, cardiovascular and autoimmune diseases (Lupus, Sjogren, rheumatoid arthritis) and non-Hodgkin lymphoma (Jones and Leonard 2017; Skuse, Printzlau and Wolstencroft, 2018; Kathrins, M. and Kolon, 2016; Ji, Zöller, Sundquist and Sundquist, 2016). They also have an increased risk for breast and lung cancers (Fallat and Donahoe, 2006; Jones and Leonard 2017; Skuse, Printzlau and Wolstencroft, 2018; Falhammar, Claahsen-van der Grinte, Reisch, Slowikowska-Hilczer, Nordenström, Roehle, Bouvattier, Kreukels and Köhler, 2018).

Turner syndrome (45X0)

Individuals with Turner syndrome have characteristic appearances, they usually have a webbed neck, a lower hairline at the back of the neck, lymphedema of the hands and feet (Jones and Leonard 2017). Their fertility is reduced due to ovarian hypofunction or premature ovarian failure. Skeletal abnormalities, kidney problems, congenital heart issues (e.g., coarctatio aortae) and inner ear problems are more common among them. They have higher risks for some behavioural and cognitive difficulties (Jones and Leonard 2017; Skuse, Printzlau and Wolstencroft, 2018). They have higher risk for several health issues such as: diabetes, stroke, inflammatory bowel disease, neuroblastoma, gonadal and bowel cancers (Jones and Leonard 2017; Ji, Zöller, Sundquist, and Sundquist, 2016; Schoemaker, Swerdlow, Higgins, Wright, Jacobs and UK Clinical Cytogenetics Group. 2008). Due to all these health issues, they have an increased overall death rate (Jones and Leonard, 2019).

We should affirm and value intersex variations and consider them as healthy expressions of human diversity. We should pay attention to informing patients and their relatives in order to be able to get their informed consent and to prevent regretted or unnecessary irreversible surgical interventions. We should also guarantee

training and care with a feminist and psychosocial perspective for professionals during or prior to transmitting information and dealing with patients.

Some intersexual people may avail of surgical procedures or hormonal treatment (with informed consent) at some point of their lives. In both cases their post-treatment care and follow-up is necessary so that long-term health outcomes can be monitored. Healthcare providers must highlight the necessity of monitoring the short- and long-term effects and suggest screening tests aligned with the guidelines and other benefits of post-treatment follow up. Post-treatment care of intersex patients must also be provided by a therapeutic team including both medical and mental health professionals (surgeon, endocrinologist, general practitioner and mental health provider or psychotherapist).

5.1.3) Specific health issues of bisexual individuals

Bisexual individuals are at risk of excessive stress, due to the stigmatisation of bisexual identity as an illegitimate identity, “just a phase”, or a transition between heterosexuality and homosexuality flourish both within the LGBT community and in mainstream society (Maimon et al. 2019). Bisexuals are labelled to be sexually irresponsible and even more promiscuous than other sexual minorities (Friedman et al. 2014). Bisexual individuals may experience unique barriers to disclosure due to the aforementioned biases, which may result in a lack of community attachment and group support.

Due to the more pervasive exclusion and perceived stigmatisation, the bisexual community deserves more attention in connection with health and health needs (Brewster and Moradi, 2010; Dodge et al. 2016). In studies not examin-

ing sexual minorities as a homogenous group, bisexual individuals report worse mental health (higher rates of anxiety, depression, mental illness, suicidality, and self-harm) and more mental healthcare utilisation than their gay and lesbian peers (Jorm et al. 2002; Tjepkema 2008; Steele et al. 2009; Wu et al. 2018; Dragon et al. 2017; Bränström 2017; Scott, Lasiuk and Norris 2016; Lhomond et al. 2014; Jabson, Farmer and Bowen 2014). Other studies have also indicated a higher occurrence of cardiovascular diseases, acute myocardial infarct, chronic bronchitis, asthma and diabetes in the bisexual population (Landers, Mimiaga and Conron 2011; Matthews and Lee, 2014; Conron, Miagama and Landers 2010). Bisexual women have a higher BMI than their heterosexual counterparts. Bisexual women are less likely to participate in routine medical screenings (such as mammography or Human Papilloma Virus screening), but more likely to have a regular HIV screening (Miller et al. 2007). They are also less likely than their heterosexual counterparts to have ever given birth, therefore they have a higher risk for breast, ovarian and endometrial cancers (Miller et al. 2007). When reporting same-sex activity during a medical encounter, bisexual women tend not to be offered birth control or STI counselling, because they are assumed to be homosexual and not at risk for pregnancy or STIs. Due to these false assumptions and the lack of adequate healthcare, bisexual women use emergency contraception and abortion more frequently than heterosexual women.

In contrast, bisexual men get tested for HIV with less likelihood than their gay peers, but more likelihood than heterosexual men, although they are at increased risk for sexually transmitted infections (STIs) compared to exclusively heterosexual men (Matthews and Lee 2014; Fredriksen-Goldsen et al. 2017; Lunn et al. 2017; Garland-Forshee et al. 2014; Mays et al. 2018; Blosnich et al. 2014). Bisexual men report more risk behaviour (such as more sex partners, condomless sex, alcohol or substance use be-

fore sex) in connection with their sexual lives than heterosexual or homosexual individuals (Everett et al. 2014; Agronick et al. 2004; Mercer et al. 2009; Jeffries 2010; Dodge et al. 2013). Alcohol dependence, smoking and other drug usage are higher among bisexual-identified women and men (Fredriksen-Goldsen et al. 2017; Garland-Forshee et al. 2014; Lhomond et al. 2014; Conron, Mimiaga and Landers, 2010).

Health professionals therefore must be aware of the unique risk factors and health needs of the bisexual population, pay attention to inclusive language when asking questions about the patient's partner, sexual life, and sexual experiences. They must avoid assumptions on the basis of the information heard and encourage patients to define and express their sexual orientation.

5.1.4) The health of homosexually experienced heterosexual persons

There is a notable difference between sexual identification and sexual attraction or behaviour. Previous studies have reported a 2-4% difference when people were asked about current same-sex attraction or same-sex sexual behaviour and current sexual orientation identity (Smith et al. 2003; Mosher, Chandra and Jones, 2005; Conron, Mimiaga and Landers, 2010; Chandra et al. 2011). In general, the vast majority (84-95%) of the population identify themselves as heterosexual, around 3-7% identify as a sexual minority (Smith et al. 2003; Conron, Mimiaga and Landers, 2010; Pachankis and Bränström, 2019). Approximately 6-9% are “homosexually experienced heterosexuals”, people who are heterosexual with homosexual experiences or attractions; they can be located on the spectrum of sexual orientation, attractions, and behaviours somewhere between heterosexual and bisexual (England, Mishel and Caudillo, 2016).

Some current studies have found mental and physical health differences between homosexually experienced heterosexual individuals compared to the LGB population or exclusively heterosexual peers (including depression, suicidality, anxiety, self-harm, body dissatisfaction, disordered eating, obesity, STIs, teenage pregnancies, abnormal Pap results, general physical health problems, sexual risk taking, and substance use) (Lhomond et al. 2014; Caceres et al. 2018; Mays et al. 2018; Patterson et al. 2018). These differences cannot be exclusively explained with Meyer's minority stress model, because that requires explicit minority identity, belonging to a sexual-minority community, or being perceived as being a member of a minority. Heterosexually identified MSM and WSW individuals more frequently suffer from certain chronic diseases or live with health limitations and non-HIV-related health conditions (Cochran and Mays 2007).

Some potentially stress-related health conditions and symptoms (heart disease, liver disease, digestive problems, headaches, asthma, back pain, chronic fatigue) also affect homosexually experienced heterosexual men and women more than exclusively heterosexual individuals. These differences can be explained with the well-known association between psychosocial distress and sexual orientation. The concordance between sexual orientation, sexual attraction and sexual experience is associated with distress in both women and men. Homosexually attracted individuals struggle with higher psychosocial distress, even without actual homosexual experience, than heterosexual peers, and the highest stress level appears in individuals with homosexual attraction but no homosexual experience (Smith et al. 2003).

A review has also found that homosexually experienced heterosexual individuals experienced more victimisation or adverse life experiences (e.g., abuse), and engage more often in risk behaviours (smoking, substance use, or sexual

risk) compared to exclusive heterosexuals (Vrangalova and Savin-Williams, 2014). Another factor which might affect this group is the lack of protective peer support, hence they do not participate in LGBTI community events because of the lack of sexual identity integration, therefore they are not integrated to the minority group. Homosexually experienced heterosexuals reported more uncertainty and exploration about sexual orientation and slightly higher fluidity in gender identity.

On a personal level of coping with any minority identity, integrating one's group membership, such as ethnicity or sexual orientation, into the global self-image is essential. Those who strongly identify with the minority group tend to report more positive psychological well-being (Molix and Bettencourt 2010). Minority studies suggest that understanding and exploring identity, being able to develop a positive attitude toward one's own minority group membership and identity are important mediators of mental wellbeing (Ghavami et al. 2011).

5.2) Age-specifications

5.2.1) LGBTI youth

Adolescence and young adulthood is a challenging phase of development, the time of discovering and constructing one’s identity, including sexual and gender identities. Young people face a multitude of physical, emotional and sexual changes; discover, accept and come to terms with their identity. This process is complicated for all adolescents, but for sexual or gender minority youth it can be even more difficult, especially if their inner recognition of being LGBTI clashes with the norms of their environment – primarily the family and the community.

Young LGBTI people are more dependent on their families and peers than people of older age groups. Young people rely financially on their families, and their family members, especially the parents, play a crucial role in adolescent development. The relationship with their parents – which affects the development of healthy relationships later in life – may be disrupted if they experience rejection because of their sexual orientation or gender identity (Katz-Wise, Rosario, and Tsappis 2016).

Peers have an equally important part in social development. The acceptance, support or disapproval of peers or family members can be crucial in either forming a healthy inner self or starting a lifelong battle with shame and self-hatred. For sexual and gender minority adolescents it is important to have contact with other LGBTI youth or role models and to have connection with individuals who have similar experiences (Doty et al. 2010). If they spend this critical period of development surrounded with stigma, discrimination or disapproval from their families, peers and other adults (such as teachers, coaches, religious leaders), young LGBTI people might find themselves isolated, marginalised and may start

to internalise feelings of shame and hatred. This all has a significant impact on health and wellbeing. Research suggests that the health disparity afflicting LGBTI people starts in adolescence. LGBTI adolescents are more exposed to stress; have higher levels of alcohol, marijuana and illicit drug use; higher risks of depression and other mental health problems, suicide and risky sex behaviours (Liu et al. 2020; Becerra-Culqui et al. 2018; Goldbach et al. 2014; Saewyc et al. 2006).

Healthcare professionals are in a position where they can assist LGBTI youth during this difficult period and can help them overcome the challenges and go on to lead healthy, fulfilling, well-adjusted lives.

5.2.1.a) Stages of adolescence

Adolescence and young adulthood can be divided into 3 developmental stages, each having different associated concerns for sexual and gender minorities.

Early adolescence (10-14 years) may be the time when young people start to feel something is different about them but do not yet understand what. They may become victims of teasing, bullying, and marginalisation. The start of menstruation and the development of secondary sexual characteristics can be stressful for transgender youth.

Middle adolescence (14-17 years) is often the start of risky sexual experimentation, with consequent risk of HIV and other STIs. Concerns regarding self-identity may add to the mental burden at this age.

Late adolescence (17+ years) – is typically the start of independent living, with associated responsibility and possibilities (potentially in-

creased freedom to come out). This is also often the time of the first independent medical appointment.

5.2.1.b) Caring for LGBTI adolescents

The goals of treating LGBTI adolescents are the same as for all young people: to promote healthy development, social and emotional wellbeing and to promote and ensure physical health. Healthcare professionals are in a good position to assist youth who are struggling with coming to terms with their sexual orientation or gender identity. They may have an important role in assisting young patients in a healthy discovery, autonomy, and self-acceptance of their orientation or identity and help to ease the transition into a healthy adulthood. The clinical setting may be in some cases the only place where youth feel safe to seek assistance and guidance. The basis of caring for LGBTI youth is creating an environment in which young people feel comfortable asking questions, can seek help and support, and can obtain medical services. Making the adolescent feel secure within clinical interaction is critical in founding a trustful patient-provider relationship.

Healthcare professionals may also be in a position to help their young patients by improving their situation in their families. They can offer guidance or ease the fear or misconceptions of parents or guardians of LGBTI youth by providing guidance and factual information about LGBTI issues. They can also inform the parents that their negative reactions may be harmful to their child’s physical and mental health (Ryan et al. 2009).

Healthcare providers working with youth should be prepared to address aspects of sexual health when caring for adolescent patients. Discussing sexuality, sexual activity or sexual risk behaviours with patients requires an open approach free of assumptions and judgements. A

provider should learn to ask questions about the sexuality, sexual orientation, and gender identity of all their patients, and must be prepared to address the concerns about gender and sexual identity, the social and psychological issues connected to this status.

Confidentiality is essential when caring for adolescents and young people. They may not want to share with their parents that they seek healthcare and they might be afraid of them discovering it. For LGBTI adolescents, there is an additional fear that their parents will learn about their identity or orientation and this fear may lead to forgoing seeking healthcare. It is crucial therefore that confidentiality is protected by every member of the clinic.

Young patients may feel uncomfortable discussing sensitive topics in the presence of their parents or guardians. Furthermore, they may even feel reasonable fear about the disclosure of their sexual orientation or gender identity and may choose to withhold this information. To avoid this, the opportunity of conducting interviews with adolescent patients in the absence of parents or guardians should be given.

Healthcare professionals should keep in mind that even at a young age, LGBTI people are at a higher risk of engaging in hazardous behaviours. Therefore, taking a careful medical history, including questions addressing their sexual activity; mental health; smoking, alcohol, and substance use; safety, violence and victimisation is important. The goals of treating LGBTI adolescents are to promote social and emotional well-being, physical health and support healthy development.

5.2.1.c) Patient interview with LGBTI adolescents

As adolescents in general are usually a healthy population, the chief complaint may not be the

main reason for the visit, so it is always advisable to use the opportunity to ask the young person if they have any other problems, questions or want anything else checked while there. The patient interview therefore is often the most important part of the medical encounter.

When discussing sexual orientation or gender identity, clinicians should avoid making assumptions about the patient’s self-identification, rather, use the patient’s own terminology for their identity, even if it does not match their sexual behaviours. For adolescents it is typical to dismiss categorisation and labels, and youth nowadays embraces bisexuality and sexual fluidity more willingly than previous generations.

Adolescents are usually physically healthy, though LGBTI youth are at a higher risk of engaging in hazardous behaviours than their heterosexual and cisgender peers. Screening for health risks should be an important part of medical history taking, with a focus on key social and behavioural areas like home, school, activities and sexual life.

5.2.1.d) Sexual health

Questions and concerns regarding sex, dating and sexuality are often in the centre of the thinking of adolescent patients, but they may be embarrassed to openly speak or ask questions in clinical settings. Normalising the topic by speaking openly about sexuality, using a relaxed tone of voice can help. It can also be useful to remind the patient at this point that the discussion is confidential.

Asking straightforward, easily understandable questions, like “Are you currently dating or in a relationship with a boy or a girl?” “Are you having sex?” is a good technique to start the discussion. Providers should use gender neutral language (partner instead boyfriend/girlfriend) when asking about romantic or sexual partners. Follow-up

questions need to specify the details of sexual activity, the use of protection, and the types of sex patients are having, including asking about anal and oral sex. These may not be considered by some as “being sexually active” (especially by young women, since they do not carry the risk of pregnancy) nevertheless, may constitute a risk of acquiring STIs. It is also important to ask about condom use and seize the opportunity for targeted prevention education. Clinicians should be specific as to the anatomy but avoid medical jargon and use expressions understood by the adolescents.

When discussing sexual health issues, usually young gay and bisexual men and transgender youth are in focus – as they have disproportionately high rates of HIV and other sexually transmitted diseases (STDs) (Mayer 2011) – but the topic should be discussed also with young lesbian and bisexual women. They are usually thought to be less at risk of acquiring HIV and other STDs, although they might be having or have had sex with men, and even engage in risky sex with male partners (Ybarra et al. 2016). It is also important to address pregnancy risks and the need for contraception. Even if a person identifies as a lesbian, it is important to ascertain the actual sexual behaviour (whether they have sex with men) as in that case they may be at risk for unplanned pregnancy (Charlton et al. 2013). Transgender men also may be at increased risk for unplanned pregnancy and in need of contraceptive and conception counselling (Light et al. 2018).

5.2.1.e) Mental health

Adolescence is often the time when mental health problems, such as depression, anxiety and psychosis, first appear. It is a difficult phase for every young person, and LGBTI youth may experience additional distress caused by the stigma connected to their identity. Life changes and transitions, normal to adolescence, are

often major psychological stressors (starting or leaving school, university, starting independent living, etc.) and for LGBTI youth this is added to the stress experienced by being a sexual or gender minority. These external stressors may trigger anxiety or depressive episodes.

Suicide is the leading cause of death among LGBTI youth. While it is difficult to estimate the actual number of suicides among LGBTI people (as sexual orientation is not recorded in death certificates, and many who attempt or commit suicide may have never discussed their identity), it is known that in epidemiological studies LGBTI youth report suicidal thoughts and suicide attempts much more often (di Giacomo et al. 2018; Liu et al. 2020). Based on the above, it is safe to state that young LGBTI people are at an increased risk of suicide, especially those who lack appropriate social support. Experiences of isolation, depression; family dysfunction, loss of family or friends; alcohol and other substance use are contributing factors (Russell and Toomey 2012; Seil et al. 2014).

Research shows that distressed patients frequently visit their primary care providers in the weeks and months before the completed suicide (Schulberg et al. 2004). This can provide an opportunity for early intervention, and also emphasises the importance of checking the signs of mental distress. Using simple screening tools like the Patient Health Questionnaire-2 (PHQ-2) can help to identify at-risk youth.

It is recommended to assess the psychological wellbeing of young people at the clinical visit, by asking about behavioural health, medications, hospitalisations, and family history of mental illness. It is also useful to ask if they have social support (someone to turn to when feeling sad or depressed) and about school, home, and peers (whether they feel isolated). Additionally, questions regarding comfort level with their sexual minority identity may help identify young people who could benefit from referral to youth-focused

LGBTI support groups, if such support groups are available.

5.2.1.f) Smoking, alcohol and substance use

Trying out alcohol, drugs and tobacco is often part of normal adolescent experimentation. Some young LGBTI people may use substances as self-medication in emotionally painful situations or as a coping strategy. LGBTI friendly bars, clubs and social settings are an important – and safe – environment for sexual and gender minority youth, however, frequenting such places may contribute to alcohol and drug use among young LGBTI people.

Studies show that sexual and gender minority youth is at high risk for substance use and substance use disorders (SUDs), especially bisexual youth and young lesbians (Marshal et al. 2008). They also start smoking and consuming alcohol earlier (Schuler and Collins 2019).

The problem associated with the use of alcohol or illicit substances – beside the physiological effects and the risk of dependence – is the danger of destructive behaviours such as high-risk sexual encounters, suicide attempts and motor accidents.

Assessing the use of alcohol and illicit drugs should be performed by asking direct questions in a non-judgemental and unprejudiced manner. For many LGBTI youth the clinical setting may be the only opportunity to ask about the potentially harmful effects of the substances used and get accurate information. It is important therefore not to scare and alarm young people but seize the opportunity and focus on prevention and harm reduction. Harm reduction strategies emphasise personal safety (consistent condom use, not driving under the influence) and help to resist peer pressure.

5.2.1.g) Safety, violence, victimisation

Many LGBTI youth experience verbal abuse, threats, and physical violence. Violence is among the leading causes of mortality in high-income countries and LGBTI youth is at especially high risk of being survivors of violence. Many of them experience periods in their lives when they are in fear for their personal safety. Continued exposure to bullying and victimisation can lead to negative mental and physical health outcomes, such as depression, anxiety, alcohol and substance use, low self-esteem and suicide attempts (Goldbach et al. 2014; Shields et al. 2012).

Schools are often the places where bullying takes place. Students who are more frequently harassed because of their sexual or gender minority status have lower grades, miss more days, and have lower educational aspirations (are less likely to plan to pursue post-secondary education) than students who are victimised less often. It implies that school bullying may have a long-term effect on the survivor’s future (Kosciw et al. 2012).

Equally important – because of its severe consequences – is the violence which occurs at home. Parental violence can include physical or verbal abuse, excluding the child from family events, blocking access to friends and resources, and blaming the child when attacked for their sexual orientation or gender identity. This parental behaviour can have serious consequences for the physical and mental health of LGBT youth (Katz-Wise et al. 2016).

Experiencing violence at school or home may lead to the isolation of the young LGBTI person. If the violence comes from a person responsible for them, or whom the youth should be able to rely on – like teachers, coaches, religious leaders, or the police – the survivor may feel confused about who to turn to for help. In these circumstances the healthcare provider might be the only person they can rely on for support or guidance. It is

important therefore to ask the adolescents how things are at home, at school, with peers; and whether they feel safe in their relationships and at the places they attend.

Providers should offer general support for the young person and assure that they are available when needed for help or advice in the future.

5.1.2.h) Physical examination, screening and immunisation

Physical examination, screening and immunisation of LGBTI youth is conducted according to the national guidelines (In Hungary the 51/1997. (XII. 18.) NM decree specifies the mandatory childhood screenings). Annual visits should include a comprehensive physical examination, and screening for the health issues discussed above (including mental health problems, smoking, alcohol or substance use and STIs). Checking the BMI index and asking about diet and eating habits is also important, as sexual minorities are more affected by obesity (especially bisexuals and lesbian women) and eating disorders (especially bisexual and transgender men).

Providers should be aware that for transgender and intersex youth the physical examination can be an extremely discomforting experience and therefore should proceed with patience and caution.

Beside age-appropriate vaccinations according to the national guidelines, LGBTI youth should be offered vaccination against Hepatitis A and B (if not included) and HPV. Beginning from ages 11-12, girls – and persons assigned female at birth – should be vaccinated to prevent cervical cancer, and adolescent boys as a prevention of HPV-associated genital and anal warts as well as anal cancer.

5.2.2.) LGBTI seniors

Older LGBTI people experience disparities in mental and physical health just the same as sexual minority people in general. There are, however, problems and challenges unique to this age group. Elderly LGBTI people must tackle the mental and physical health consequences of life-long invisibility. The lack of recognition of partners within healthcare settings has special consequences for them in the case of illness or death. They may have less family support and be more isolated socially. Experiencing prejudice from staff or other residents makes it difficult for them to use services such as nursing homes or residential care homes. Healthcare professionals should be informed as to the specific challenges faced by elderly LGBTI people and be prepared to provide culturally competent care for them.

When defining older LGBTI people we use the term 'elderly' or older person for a chronological age of 65 years or above. This definition implies that elderly LGBTI people grew up and spent a considerable part of their lives in an era when being a sexual minority was viewed as a crime or as a mental illness. The consequences of facing criminalisation, familial and community rejection, employment discrimination and medical pathologisation amount to considerable levels of minority stress with all its negative health effects. In Hungary, a homosexual act was a criminal offence until 1961 and only much after the American Psychiatric Association (APA) removed the diagnosis from the Diagnostic and Statistical Manual (DSM) in 1973 did the medical profession in Hungary cease to treat homosexuality as a psychiatric disease. Coming out – or being outed by others – could result not only in persecution or forced hospitalisation by authorities, but also in great amounts of hatred, homophobia and transphobia from society. The AIDS epidemic itself eventuated an increased intolerance towards LGBTI people (mostly towards gay men) in the last two decades of the

20th century (Ruel and Campbell 2006). Other specific traumas also afflict LGBTI people more often. In some groups and places, being an older gay person almost certainly entails having lost loved ones due to AIDS (Genke 2004). These life experiences of older LGBTI people impact their psychological and social functioning.

As a consequence of the long-term concealment of sexual orientation or gender identity and exposure to discrimination, older LGBTI are more susceptible to poor health. They are more likely to have experienced homo-, bi- or transphobia in healthcare situations, and are more willing to keep their identity hidden from their clinician or more likely to avoid healthcare altogether. Therefore, in order to provide optimal care, it is important to create an environment in which older LGBTI people feel respected and welcome and where they can feel safe to disclose their sexual orientation or gender identity.

5.2.2.a) Physical health

Physical health problems of older LGBTI people are similar to those of the general population, certain aspects however require particular attention. Older sexual or gender minority people may be at greater risk of cardiovascular diseases, as certain CVD risk factors (smoking, alcohol and drug consumption, stress and in some subgroups obesity) are more common among them.

Similarly, due to higher rates of cancer risk factors in their lives they may be more affected by cancers. Smoking and alcohol use elevates the risk of almost every cancer type. HPV infection constitutes a specific risk for cervical and anal cancers, nulliparity and obesity for ovarian and breast cancers, while HIV infection is associated with HIV related cancers, such as Kaposi’s sarcoma, non-Hodgkin lymphoma, cervical cancer, angiosarcoma, primary central nervous system lymphoma.

5.2.2.b) Sexual health

It is important to address the topic of sexual health in older LGBTI people too. More than half of the people above 65 are sexually active, and both they and their healthcare providers often underestimate the risk of STIs. WSW who had been sexually active with both men and women are at the same risk of STIs as heterosexual women. Sexually active older MSM transgender people are at risk of acquiring HIV and STIs, and the fact that they are less likely to use condoms and have in general less knowledge about STIs adds to their risk. Hiding sexual orientation or gender identity from the provider increases this risk, as consequently they are less likely to receive appropriate sexual health counselling. It is advisable for older MSM that they should be screened for STIs and HIV with the same regularity as the younger generations.

HIV and AIDS is often diagnosed later among older patients due to several factors. Older LGBTI people are less likely to participate in screening programs. Healthcare providers often do not consider it as a likely diagnosis, and the symptoms are often mistaken for other age-related problems. Older patients might be coping with other diseases that can mask the signs of AIDS. Moreover, AIDS often progresses more rapidly, and elderly patients may be at greater risk of HIV disease progression and poorer response to treatment (Pratt et al. 2010).

The prevalence of erectile dysfunction rises with age, and sexually active men often start using PDE5 inhibitors (such as sildenafil – Viagra) to deal with this problem. The abuse of PDE5 inhibitors is more prevalent among MSM, and their use is associated with risky sexual behaviours (Fisher et al. 2011). Precaution is needed, as many drugs taken by older LGBTI people can interact with PDE5 inhibitors. The drug interaction between PDE5 inhibitors and nitrates (nitroglycerin, isosorbide dinitrate, isosorbide mononitrate) are known the best, and the use of

PDE5 inhibitors in patients receiving nitrates is contraindicated. Less is known about the interaction with HIV protease inhibitors (PIs) (especially ritonavir), whose coadministration may significantly increase the plasma concentrations of PDE5 inhibitors. PDE5 inhibitors may also potentiate the hypotensive effect of alpha blockers, resulting in symptomatic hypotension.

5.2.2.c) Mental health

There is little data about the prevalence of mental health problems among older LGBTI adults. The fact that most of them experienced discrimination, homo- or transphobia and persecution over a long period of time indicates that they may be more vulnerable to mental health problems. Examining population-based data, the results indicate that older LGBTI people face an elevated risk of disability and mental distress, they are more likely to smoke and engage in excessive drinking compared to their heterosexual counterparts (K. I. Fredriksen-Goldsen et al. 2013).

Isolation and loneliness

Older LGBTI people have similar concerns about aging as the general older cohort, they are anxious about loneliness, health and financial problems. In addition to expected losses associated with the aging process itself, they tend to worry about rejection by their children and grandchildren if they came out to their family and have concerns about discrimination in healthcare, employment, housing, and long-term care (Quam and Whitford 1992).

Older LGBTI adults are more likely to live alone and have fewer children (Karen I. Fredriksen-Goldsen et al. 2013). They are more likely to have experienced divorce, be childless, or have less contact with their children than their heterosexual counterparts (Fokkema and Kuypers 2009). Isolation and loneliness are higher among them than among their heterosexual peers (Kim and

Fredriksen-Goldsen 2016). Older LGBTI people may not be able to access the support of their family and/or the LGBTI community as easily as younger LGBTI people. In consequence, they have to rely more often on social services and are more excluded from classic forms of social support.

Long-term care is often unprepared to adequately respond to the needs of LGBTI people. In a US study, residents of a long-term care facility experienced harassment from staff or other residents, denial of letting the spouse or partner make decisions for an LGBTI resident and refusal to refer to transgender residents with their preferred name or pronouns (National Senior Citizens Law Center et al. 2011). Encountering this kind of prejudice from staff or other residents makes it difficult to use services such as nursing homes or residential care homes.

End-of life issues

Disenfranchised grief – grief that is not acknowledged by society – is often experienced by LGBTI people, especially by the older generation. It may appear on the personal level: mourning,

when a partner dies, remains invisible and unacknowledged if the same-sex relationship was not disclosed. On the public level it can mean that the surviving same-sex partner is excluded from making funeral arrangements or other decision-making.

Older LGBTI people also face challenges within healthcare situations in relation to decision-making around the healthcare of a partner (like hospital visits, next-of-kin) if the partnership is not recognised by law. Healthcare providers have an important role in helping their patients plan for the end of their lives and for situations in which they are incapable of making decisions. Older LGBTI persons living in countries where their partnerships are not legally recognised are in particular need of advance planning. In Hungary, different possibilities exist for addressing this eventuality. A living will – a statement about the type and extent of treatment one requires, on the assumption that they will not be able to make that at the relevant time – is a possibility in order to make decisions in advance. A healthcare power of attorney is a legal document that designates a specific individual to make decisions on the patient's behalf.

5.3) Other specifications

5.3.1) Family (rainbow families, families with LGBTI children)

Rainbow families are families with LGBTI members. The term is usually used for families where the parents are members of the LGBTI community, but in this chapter of the handbook we will also mention families where the child belongs to LGBTI population with heterosexual, cisgender parents.

5.3.1.a) LGBTI parenting

A significant number of LGBTI people are already parents or would like to have children in the future. There are several options for LGBTI people to become parents, some of which are accessible, while others are not available, illegal or completely unregulated depending on the legal framework of their country of residence.

Assisted reproduction, surrogacy, co-parenting, and adoption can all be the foundations of a rainbow family, though regulations in different countries regarding the options of LGBTI parenthood vary widely. We should be aware of the current regulations of our country regarding these methods. In some cases, rainbow families involve two parents (two mothers, two fathers, one mother and one father), while in other cases there are more parents (e.g., polyamorous relationships or co-parenting). Try to avoid any assumptions about the adults accompanying the child, try to wait for them to explain their relations, or ask them to do so if you have any questions about it. In some cases, family members come out as a rainbow family, in this case they can name each other in many different ways (spouse, partner, wife, husband, father, dad, mom, mother etc.), while in other cases they conceal their relations,

as the relationships of LGBTI individuals are still very often stigmatised. Creating a welcoming environment for LGBTI people might help them to clarify their connections. Try not to use a language which excludes any of the parents or make assumptions about their relations to each other or to the child, because it can be very hurtful for rainbow families.

5.3.1.b) Forming a rainbow family

Rainbow families include biological, non-biological, foster or stepchildren/parents. Legal, medical, familial, and financial issues might all influence LGBTI adults' possibilities for having children.

In some cases, the children were born in a previous heterosexual relationship before their parents' coming-out, and after separation or divorce they became members of a rainbow family. One of the most common options to form a rainbow family is adoption: depending on the current regulation of the country, one or both parents can be adoptive parents of the child or children. Another possibility of forming a rainbow family is assisted reproduction or home insemination with an anonymous or known (e.g., a friend or acquaintance) sperm-donor. In some cases, LGBTI adults might decide to choose co-parenting as an option and raise the children together with a friend or another couple. Gay and bisexual men, or trans and intersex individuals who do not have the opportunity to deliver a child or participate in artificial insemination might consider surrogacy. In the case of surrogacy, a woman carries the child either by having her own oocyte inseminated or with embryo transplantation.

Cross-sex hormone therapies and sex assignment surgeries can be a significant burden for

trans individuals in connection with starting a family, so it is important to inform them about their possibilities for having children in the future (e.g., avoiding hysterectomy, oocyte, sperm or embryo freezing, adoption, surrogate motherhood) before hormone therapy or surgery.

Barriers to healthcare access

Intake forms, medical history forms and administrative systems often do not make it possible to clarify the real circumstances of the child and consequently, same-sex couples often experience lack of respect for their partnership, parenthood, and family (Shields et al. 2012). Health professionals often exclude the non-biological parent and assume that they are "just" a friend, a sibling, or a grandparent. Same-sex couples therefore frequently face a lack of recognition of their partnership, parenthood, and family during medical encounters.

Visitation rights and decision-making power can also be an important issue in the case of rainbow families, because the partnership or the parenthood is often not recognised by the law, and healthcare staff also often denies recognition to the non-biological or non-adoptive parent or same-sex partner. Hayman and colleagues found that in some cases only male partners were allowed to accompany women patients, non-biological parents were excluded from the neonatal intensive care unit, or they were denied receiving information about the child (Crouch et al. 2012; Hayman et al. 2013; Hočevár 2014).

Rainbow children in straight families

The handbook contains detailed information about the health needs of LGBTI youth in Chapter 5.2.1., yet we consider it important to mention the following here as well:

LGBTI youth have a higher risk for several mental and physical health issues (including but not limited to depression, anxiety, PTSD, suicidal

thoughts, attempting suicide, smoking, alcohol and drug usage, STIs, teenage pregnancy, bullying, harassment, abuse).

Health and social care workers must be aware of the special needs and risks of LGBTI children in order to provide them with adequate care.

In some cases, we need to provide an opportunity for our paediatric patients to have a private consultation with us without their parents, in case they want to share or discuss information which they cannot disclose or share in front of the parent. This may be particularly important in the case of LGBTI youth to provide them an opportunity to reveal their sexual orientation and gender identity, to discuss sexual health, or to explore school bullying or domestic violence.

5.3.2) Intersectionality

LGBTI individuals are often treated as a homogeneous group, though they experience multiple forms of discrimination, marginalisation, or harassment due to their parallel group identities (sexual orientation, race/ethnicity, gender, disability, age, immigrant status, educational level or socio-economic status) (Dyar et al. 2019). LGBTI individuals may experience ageism, sexism, racism, ableism alongside homophobia, biphobia or transphobia due to their multiple identities, which might cause them to be more exposed to the adverse mental and physical health effects of minority stress.

Some of the current literature explores that multiple identities have a synergistic impact on the health of LGBTI people: non-white LGBTI individuals experience homophobia and transphobia within their racial or ethnic minority communities and racial micro-aggressions or discrimination in the LGBTI community. Therefore, their multiple minority identities might further restrict the opportunities for gaining support and

have more adverse effects on their physical and mental health.

Other studies suggest that LGBTI people of colour may have better coping and higher resilience due to experiencing and establishing their racial identity from birth in a protective and supportive community, therefore they have an opportunity to learn and develop identity-protecting skills and cope better with stigmatised identities (Meyer 2015; Moore 2010; Bowleg et al. 2003). Dyar and colleagues in their multi-dimensional research have found that bisexual people have the highest risk for the physical conditions investigated (such as gastrointestinal conditions, cardiovascular disease, high blood pressure, high cholesterol, hepatic disease, arthritis, obesity, diabetes or stroke) regardless of their racial identity, while LGB latino and black individuals reported to have better physical health than white sexual minority individuals (Dyar et al. 2016).

When using intersectionality theory, we must take into account not only racial and ethnic affiliation but also other group identities. Previous studies have highlighted health disparities developed on the basis of social determinants or socio-economic disadvantages such as housing, poverty, level of education, occupational level, health literacy and language barriers (Adler and Rehkopf 2008; Solar and Irwin 2010). LGBTI individuals – especially LGBTI people of colour – have a higher risk for unemployment, poverty, and homelessness, therefore these factors should also be considered as adverse effects on general health and barriers to receiving proper healthcare.

LGBTI immigrants and refugees also have a special position due to their double marginalisation, and they also have poorer health outcomes and significant difficulties when trying to access healthcare. LGBTI immigrants and refugees might come from countries where their sexual orientation or gender identity is criminalised and where disclosing their LGBTI identity may

have resulted in punishment, rape or torture (Haley and Kothary 2016). In the case of immigrant or refugee patients, we might experience language barriers, misunderstandings or cultural differences more often. In order to minimise the effect of cultural and language differences, it is recommended to ask open but clear questions and to use the patient’s expressions in terms of sexual orientation, partner and gender identity.

5.3.3) Domestic violence/ intimate partner violence

Domestic violence and intimate partner violence can also occur in same-sex relationships and affect trans, intersex and non-binary survivors.

In many cases, LGBTI survivors do not seek help from survivor support programs because they fear that they will not be welcomed and accepted there. Some of the domestic violence programs are not prepared to address the needs of gay, lesbian, bisexual and trans survivors. The dominant view on the dynamic of domestic or intimate partner violence says that the man is the abuser and the woman is the survivor, making it difficult for the victim, the environment and the provider to recognise intimate partner violence in LGBTI relationships.

There are some specific concerns in the case of intimate partner violence or domestic violence in same-sex relationships:

Due to the heteronormative and cisnormative social environment and the lack of representation of LGBTI relationships in the media (movies, books, music etc.), sexual and gender minority individuals can rarely see examples of happy, loving, stable same-sex relationships. Social discourse still often labels non-heterosexual and transgender individuals as perverted and unnatural. In many cases LGBTI individuals are

rejected and disowned even by their own families, which might confirm their incapability for a positive, supportive, loving relationship, thus increasing the risk for an abusive relationship. Shame and self-doubt and negative self-image can be easily used against LGBTI survivors (Rollé et al. 2019). In other cases, LGBTI people are not rejected explicitly but not allowed to talk about their partner or their private lives. Homophobia, transphobia, biphobia, intersexphobia and enbyphobia experienced in the society and the (birth) family create isolation which favours the abuser ("Your mother only says it because she doesn't accept our relationship, I would never hurt you"). Traditional gender role socialisation (e.g., encouraging little boys to hide their emotions and punishing or humiliating them if they fail to do so) can also prevent adult men or transgender women as survivors from seeking help. It is challenging for trans women to ask for help from women-centred organisations, because they are afraid of being denied help because of their sex assigned at birth. Trans men cannot ask for help at a women-centred service, because those services can no longer provide for them. Both trans women and men might postpone or refuse to seek shelter or assistance from a service that is appropriate for their gender identity out of fear that the service will not perceive them as “real” women / men or that they will be ridiculed or further abused. Trans survivors, especially if abused by women, often fear that their stories will not be believed (Calton, Cattaneo and Gebhard 2015).

Discussing sexuality or sexual life is often considered a taboo. Growing up with the message that their relationship and sexuality is perverted, shameful and abnormal, LGBTI people find it even harder to discuss sexual abuse, even if it would be necessary. When they are sexually abused, LGBTI people often conceal it because they do not want to misrepresent the community or reinforce stereotypes (Rollé et al. 2019; Calton, Cattaneo and Gebhard, 2015). Even in heterosexual relationships, abusers often use sexual abuse

as a tool for securing the survivor’s silence. Trans or intersex survivors who have a unique body might find it extremely stressful and difficult to discuss abuse with a lawyer, provider or social worker.

Threats are also common tools for abusers in the aim of maintaining power imbalance and control over survivors. In the case of LGBTI survivors, several additional opportunities are given for the abuser to control their victim. For sexual and gender minority people who are still in the closet, the threat of “outing” someone at school or at the workplace, to employers or significant relations can be extremely intimidating (Carvalho et al. 2011). Survivors who are not out about their sexual orientation or gender identity are further hindered in seeking help, because they are not willing to disclose their orientation or gender identity (Calton, Cattaneo and Gebhard 2015).

When children are also involved in intimate partner violence, it also aggravates the situation of the survivor that in the case of same-sex relationships, the birth parent or adoptive parent has all the rights regarding the child. This means that if the survivor is not the biological parent or adoptive parent, they might have to leave their children or must engage in precarious legal proceedings for custody, in which they are exposed to system-level abuse and forced contact with the abuser. Perceived discrimination, prejudice and ignorance about LGBTI individuals confirms gender and sexual minority survivors’ fear that it is extremely unlikely that the court would grant them custody over their children.

Even if LGBTI survivors ask for help, several barriers still affect them: (1) most providers would view intimate partner violence in a heterosexual framework, (2) they might face insensitivity, or lack of awareness of their specific needs; (3) they might experience further abuse or discrimination (Campo and Tayton 2015).

According to Fileborn, reporting LGBTI domestic violence is also hindered because the survivors do not want to picture the community in a negative way, or do not wish to become alienated, and they are also afraid that their experience will not be taken seriously by police or they will be discriminated (Fileborn, 2012).

If you suspect intimate partner violence, create an opportunity to ask the patient questions in a safe environment, regardless of gender, gender identity or sexual orientation.

The New York City Gay & Lesbian Anti-Violence Project (2000) have published a useful collection about the tools of power & control in lesbian, gay, transgender and bisexual relationships. It lists both LGBT specific and non-specific tools that often occur in abusive relationships:

Heterosexism – Perpetuating and utilising the invisibility of LGB relationships to define relationship norms. Using heterosexual roles to normalise abuse and shame the partner for same sex and bisexual desires. Using cultural invisibility to isolate the partner and reinforce control. Limiting connection to the community.

Homo/Biphobia – A part of heterosexism. Using the awareness of fear and hatred of lesbians, gay men and bisexual persons to convince the partner of the danger in reaching out to others. Controlling the expression of sexual identity and connections to the community. Outing the partner's sexual orientation. Shaming. Questioning the partner's status as a "real" lesbian or gay man, or bisexual person.

Transphobia – Using the fear and hatred of anyone who challenges traditional gender expression, and/or who is transsexual, to convince the partner of the danger in reaching out to others. Controlling and questioning the expression of gender identity, controlling connections to the community. Outing the partner's gender identity. Shaming. Questioning the validity of the partner's gender.

Intersexphobia – Using the fear and hatred of anyone who has variant sex characteristics, challenges traditional gender expression, and/or who is intersex to convince the partner of danger in reaching out to others. Controlling and questioning the expression of gender identity, controlling connections to the community. Outing the partner with their gender or sex characteristics. Shaming. Questioning the validity of the partner's gender.

Enbyphobia – Using the fear and hatred of anyone who challenges traditional gender expression and/or who is non-binary, to convince the partner of the danger in reaching out to others. Controlling and questioning the expression of gender identity, controlling connections to the community. Shaming. Questioning the validity of the partner's gender.

HIV-related abuse – Threatening to reveal the partner's HIV status to others. Blaming the partner for having HIV. Withholding medical or social services. Telling the partner they are "dirty". Using illness to justify abuse.

Isolation – Restricting the partner's freedom, controlling their personal social contacts, access to information and participation in groups or organisations. Limiting the who, what, where and when of daily life. Restraining their movement, locking the partner in or out.

Threats – Making physical, emotional, economic, or sexual threats. Threatening to harm the partner's family or friends. Threatening to make a report to city, state or federal authorities that would jeopardise the partner's custody, economic situation, immigration, or legal status. Threatening suicide.

Intimidation – Creating fear by using looks, actions, gestures and destroying personal items, mementos, or photos. Breaking windows or furniture. Throwing or smashing objects. Trashing clothes, hurting or killing pets.

Economic abuse – Controlling economic resources and how they are used. Stealing money, credit cards or checks. Running up debt. Fostering total economic dependency. Using the economic status to determine relationship roles/norms, including controlling the purchase of clothes, food, etc.

Psychological & emotional abuse – Criticising constantly. Using verbal abuse, insults, and ridicule. Undermining the partner's self-esteem. Trying to humiliate or degrade the partner in private or public. Manipulating the partner with lies and false promises. Denying the partner's reality.

Entitlement – Treating the partner as inferior based on race, religion, ethnicity, education, wealth, politics, class privilege or lack of, physical ability. Demanding that one's own needs always come first. Interfering with a partner's job, personal needs and family obligations.

Using children – Threats or actions to take the children away or have them removed. Using children to relay messages. Threats to or actual harm to children. Revealing or threatening to reveal the partner's sexual orientation or gender identity to children or others to jeopardize parent-child relationship, custody or relationships with family, friends, school, or others.

Physical abuse – Slapping, hitting, shoving, biting, choking, pushing, punching, beating, kicking, stabbing, shooting, or killing. Using weapons.

Sexual abuse – Forcing sex. Forcing specific sex acts or sex with others. Physical assaults to "erogenous" body zones. Refusing to practice safer sex. In S&M refusing to negotiate or not respecting contract/scene limits or safe words.

5.3.4) Homelessness

Due to several factors such as family rejection, lack of support, unhealthy coping mechanisms

and more frequent mental health issues, LGBTI people are more likely to be homeless than heterosexual, cisgender peers (Cochran et al. 2002; Corliss et al. 2011; Rosario, Schrimshaw and Hunter 2012).

LGBTI people are at risk for a number of factors that contribute to homelessness.

Experiences of stigmatisation, discrimination and bullying and the lack of a supporting and accepting environment induce lower self-esteem, shame, guilt and self-blame, which further isolate LGBTI individuals and might lead to running away and homelessness.

LGBTI youth often face discrimination at home or in foster care, and this can cause the breakdown of family relations and rejection. In some cases, their caregivers force LGBTI youth to leave their home, either because they suspect their gender identity or sexual orientation or after their coming out (Choi 2015; Fraser 2019).

LGBTI youth also face higher levels of verbal, emotional, physical or sexual harassment or abuse at home or in foster care on the basis of their sexual orientation or gender identity, which might be an important background factor of running away (Fraser et al. 2019; Choi et al. 2015; Keuroghlian, Ard and Makadon 2014).

Once they become homeless, LGBTI people will be even more exposed to adverse health effects.

Homeless LGBTI youth have a higher risk for mental disorders, major depression, PTSD, suicidal ideation or suicide attempts than heterosexual and cisgender peers, and they have also reported worse physical health (Choi et al. 2015). The increased risk for abuse or sexual victimisation increases after they have become homeless: homeless LGBTI people also face greater risk of being physically or sexually abused on the streets. Living on the streets and lacking any support or stability and financial resources, homeless LGBTI

people may engage in survival sex and sex work, exposing themselves to additional risks such as STIs and HIV (Fraser et al. 2019).

There is a bilateral relation between alcohol dependence, substance use, mental health disorders and homelessness.

Seeking help in healthcare institutions or in social care becomes even more challenging for LGBTI people when they are living on the street, due to stigmatisation and discrimination toward homeless individuals.

Guidelines suggest the following for social workers in order to care for homeless LGBTI youth (National Alliance to End Homelessness, 2009; Choi et al. 2015):

- Create a safe and inclusive environment for LGBTI individuals;
- Provide LGBTI competency training to all agency employees and volunteers;
- Treat LGBTI youth respectfully and ensure their safety;
- Address their identity properly and respectfully during the intake process;
- Support LGBTI youth;
- Ensure them access to education, medical care, and mental healthcare;
- Inform LGBTI youth about LGBTI programs, NGOs and services;
- Develop connections to LGBTI organisations and the LGBTI community;
- Refer them to LGBTI inclusive health professional if necessary.

References

■ Adams, N.J.& Vincent, B. 2019. Suicidal Thoughts and Behaviors Among Transgender Adults in Relation to Education, Ethnicity, and Income: A Systematic Review. *Transgender health*, 4(1), 226–246. <https://doi.org/10.1089/trgh.2019.0009>

■ Adler, N.E. & Rehkopf, D.H. 2008. U.S. disparities in health: descriptions, causes, and mechanisms. *Annual review of public health*, 29, 235–252. <https://doi.org/10.1146/annurev.publhealth.29.020907.090852>

■ Agronick, G., O'Donnell, L., Stueve, A., Doval, A.S., Duran, R., Vargo, S. 2004. Sexual behaviors and risks among bisexually- and gay-identified young Latino men. *AIDS Behav*; 8(2):185–97.

■ American Psychiatric Association. 2017. Gender Dysphoria Diagnosis. <https://www.psychiatry.org/psychiatrists/cultural-competency/education/transgender-and-gender-nonconforming-patients/gender-dysphoria-diagnosis>

■ Amnesty International. 2017. First, Do No Harm: Ensuring the Rights of Children with Variations of Sex Characteristics in Denmark and Germany Report. <https://www.amnesty.org/download/Documents/EUR0160862017ENGLISH.PDF>

■ Aramburu A.C. 2016. Gender nonconforming and transgender children/youth: Family, community, and implications for practice. *Journal of the American Association of Nurse Practitioners*. 28. <https://doi.org/10.1002/2327-6924.12363>

■ Bauer M. and Truffer D. 2019. Intersex Genital Mutilations Human Rights Violations Of Children With Variations Of Reproductive Anatomy. <https://intersex.shadowreport.org/public/2019-CRC-Malta-NGO-Zwischengeschlecht-Intersex-IGM.pdf>

■ Becerra-Culqui, T.A., Liu, Y., Nash, R. Cromwell, L., Flanders, W.D., Getahun, D., Giammattei, S.W., Hunkeler, E.M., Lash, T.L., Millman, A., Quinn, V.P., Robinson, B., Roblin, D., Sandberg, D.E., Silverberg, M.J., Tangpricha, V. & Goodman, M. 2018. “Mental Health of Transgender and Gender Nonconforming Youth Compared With Their Peers.” *Pediatrics* 141(5):e20173845. <https://doi.org/10.1542/peds.2017-3845>.

■ Benestad, E.E.P. 2009. Addressing the disturbed, like ripples in water: Intervention with the social networks of children who transe. *Sexual and Relationship Therapy*. 24. 207-216. 10.1080/14681990902934735.

■ Biggs, M. 2020. Puberty Blockers and Suicidality in Adolescents Suffering from Gender Dysphoria. *Arch Sex Behav* 49, 2227–2229 <https://doi.org/10.1007/s10508-020-01743-6>

■ Bizic, M., Kojovic, V., Duisin, D., Stanojevic, D., Vujovic, S., Milosevic, A., Korac, G., & Djordjevic, M. L. 2014. An overview of neovaginal reconstruction options in male to female transsexuals. *The-ScientificWorldJournal*, 2014, 638919. <https://doi.org/10.1155/2014/638919>

■ Bloisnich, J.R., Farmer, G.W., Lee, J.G., Silenzio, V.M., & Bowen, D.J. 2014. Health inequalities among sexual minority adults: evidence from ten U.S. states, 2010. *American journal of preventive medicine*, 46(4), 337–349. <https://doi.org/10.1016/j.amepre.2013.11.010>.

■ Bowleg, L., Huang, J., Brooks, K., Black, A., & Burkholder, G. 2003. Triple Jeopardy and Beyond: Multiple Minority Stress and Resilience Among Black Lesbians. *Journal of Lesbian Studies*, 7(4), 87–108. https://doi.org/10.1300/J155v07n04_06.

■ Bränström R. 2017. Minority stress factors as mediators of sexual orientation disparities in mental health treatment: a longitudinal population-based study. *Journal of epidemiology and community health*, 71(5), 446–452. <https://doi.org/10.1136/jech-2016-207943>.

■ Brewster, M.E. & Moradi, B. 2010. Perceived experiences of anti-bisexual prejudice: Instrument de-

- velopment and evaluation. *Journal of Counseling Psychology*, 57(4), 451–468. <https://doi.org/10.1037/a0021116>.
- Bubanj, T.B., Perovic, S.V., Milicevic, R.M., Jovicic, S.B., Marjanovic Z.O. & Djordjevic M.M. 2004. Sexual Behavior and Sexual Function of Adults After Hypospadias Surgery: A Comparative Study. *Journal of Urology* [Internet]. Ovid Technologies (Wolters Kluwer Health); 171(5), 1876–9. <https://doi.org/10.1097/01.ju.0000119337.19471.51>
 - Burcombe, R. J., Makris, A., Pittam, M. and Finer, N. 2003. Breast cancer after bilateral subcutaneous mastectomy in a female-to-male trans-sexual. *Breast* (Edinburgh, Scotland), 12(4), 290–293. [https://doi.org/10.1016/s0960-9776\(03\)00033-x](https://doi.org/10.1016/s0960-9776(03)00033-x)
 - Caceres, B.A., Brody, A.A., Halkitis, P.N., Dorsen, C., Yu, G., & Chyun, D.A. 2018. Sexual Orientation Differences in Modifiable Risk Factors for Cardiovascular Disease and Cardiovascular Disease Diagnoses in Men. *LGBT health*, 5(5), 284–294. <https://doi.org/10.1089/lgbt.2017.0220>
 - Calton, J., Cattaneo, L.B. & Gebhard, K.T. 2015. Barriers to help seeking for lesbian, gay, bisexual, transgender, and queer survivors of intimate partner violence. *Trauma, Violence and Abuse*.
 - Campo M & Tayton S. 2015. Intimate partner violence in lesbian, gay, bisexual, trans, intersex and queer communities CFCA Practitioner Resource. Melbourne: Australian Institute of Family Studies. <https://aifs.gov.au/cfca/publications/intimate-partner-violence-lgbtq-communities>.
 - Carvalho, A.F., Lewis, R.J., Derlega, V.J., Winstead, B.A., & Viggiano, C. 2011. Internalised sexual minority stressors and same-sex intimate partner violence. *Journal of Family Violence*, 26, 501-509.
 - Centers for Disease Control and Prevention (CDC) – National Center on Birth Defects and Developmental Disabilities, 2020. Facts about Hypospadias. <https://www.cdc.gov/ncbddd/birthdefects/hypospadias.html>
 - Chandra, A., Mosher, W. D., Copen, C. & Sionean, C. 2011. Sexual behavior, sexual attraction, and sexual identity in the United States: data from the 2006-2008 National Survey of Family Growth. *National health statistics reports*, (36), 1–36.
 - Charlton, B.M., Corliss, H.L., Missmer, S.A., Rosario, M., Spiegelman, D. & Austin. S.B. 2013. “Sexual Orientation Differences in Teen Pregnancy and Hormonal Contraceptive Use: An Examination across 2 Generations.” *American Journal of Obstetrics and Gynecology*, 209(3):204.e1-204.e8. <https://doi.org/10.1016/j.ajog.2013.06.036>
 - Chew, D., Anderson, J., Williams, K., May, T. & Pang, K. 2018. Hormonal Treatment in Young People With Gender Dysphoria: A Systematic Review. *Pediatrics*, 141(4), e20173742. <https://doi.org/10.1542/peds.2017-3742>.
 - Choi, S., Wilson, B. D, Shelton, J. & Gates, G. J. 2015. Serving Our Youth 2015: The Needs and Experiences of Lesbian, Gay, Bisexual, Transgender, and Questioning Youth Experiencing Homelessness. UCLA: The Williams Institute. Retrieved from <https://escholarship.org/uc/item/1pd9886n>.
 - Cochran, B. N., Stewart, A. J., Ginzler, J. A., & Cauce, A. M. 2002. Challenges faced by homeless sexual minorities: comparison of gay, lesbian, bisexual, and transgender homeless adolescents with their heterosexual counterparts. *American journal of public health*, 92(5), 773–777. <https://doi.org/10.2105/ajph.92.5.773>.
 - Cochran, S. D. & Mays, V. M. 2007. Physical health complaints among lesbians, gay men, and bisexual and homosexually experienced heterosexual individuals: results from the California Quality of Life Survey. *American journal of public health*, 97(11), 2048–2055. <https://doi.org/10.2105/AJPH.2006.087254>.
 - Cohen-Kettenis P.T. 2005. Gender change in 46,XY persons with 5alpha-reductase-2 deficiency and 17beta-hydroxysteroid dehydrogenase-3 deficiency. *Archives of sexual behavior*, 34(4), 399–410. <https://doi.org/10.1007/s10508-005-4339-4>.
 - Conron, K. J., Mimiaga, M. J., & Landers, S. J. 2010. A population-based study of sexual orientation identity and gender differences in adult health. *American journal of public health*, 100(10), 1953–1960. <https://doi.org/10.2105/AJPH.2009.174169>.
 - Cools, M., Drop, S. L., Wolffenbuttel, K. P., Oosterhuis, J. W. and Looijenga, L. H. 2006. Germ cell tumors in the intersex gonad: old paths, new directions, moving frontiers. *Endocrine reviews*, 27(5), 468–484. <https://doi.org/10.1210/er.2006-0005>
 - Corliss, H. L., Goodenow, C. S., Nichols, L., & Austin, S. B. 2011. High burden of homelessness among sexual-minority adolescents: findings from a representative Massachusetts high school sample. *American journal of public health*, 101(9), 1683–1689. <https://doi.org/10.2105/AJPH.2011.300155><https://doi.org/10.2105/AJPH.2011.300155>
 - Creighton S. 2001. Surgery for intersex. *Journal of the Royal Society of Medicine*, 94(5), 218–220. <https://doi.org/10.1177/014107680109400505>
 - Crouch, S., Waters, E., McNair, R. Power, K. and Davis, E. 2012. ACHES – The Australian study of child health in same-sex families: Background research, design and methodology. *BMC public health*. 12. 646. 10.1186/1471-2458-12-646.
 - Cunningham T.J., Xu, F. & Town, M. 2016. Prevalence of Five Health-Related Behaviors for Chronic Disease Prevention Among Sexual and Gender Minority Adults – 25 U.S. States and Guam, MMWR Morb Mortal Wkly Rep. 2018;67(32):888-93.
 - Danon, L. M., and Krämer, A. 2017. Between Concealing and Revealing Intersexed Bodies: Parental Strategies. *Qualitative health research*, 27(10), 1562–1574. <https://doi.org/10.1177/1049732317697100>.
 - de Vries, A. L., McGuire, J. K., Steensma, T. D., Wagenaar, E. C., Doreleijers, T. A., and Cohen-Kettenis, P. T. 2014. Young adult psychological outcome after puberty suppression and gender reassignment. *Pediatrics*, 134(4), 696–704. <https://doi.org/10.1542/peds.2013-2958><https://doi.org/10.1542/peds.2013-2958>
 - di Giacomo, E, Krausz, M., Colmegna, F., Aspesi, F. & Clerici, M. 2018. “Estimating the Risk of Attempted Suicide Among Sexual Minority Youths: A Systematic Review and Meta-Analysis.” *JAMA Pediatrics* 172(12):1145. <https://doi.org/10.1001/jamapediatrics.2018.2731>
 - Dicken, B. J., Billmire, D. F., Krailo, M., Xia, C., Shaikh, F., Cullen, J. W., Olson, T. A., Pashankar, F., Malogolowkin, M. H., Amatruda, J. F., Rescorla, F. J., Egler, R. A., Ross, J. H., Rodriguez-Galindo, C. & Frazier, A. L. 2018. Gonadal dysgenesis is associated with worse outcomes in patients with ovarian nondysgerminomatous tumors: A report of the Children's Oncology Group AGCT 0132 study. *Pediatric blood & cancer*, 65(4),
 - Dodge, B., Herbenick, D., Friedman, M. R., Schick, V., Fu, T. J., Bostwick, W., Bartelt, E., Muñoz-Laboy, M., Pletta, D., Reece, M., & Sandfort, T. G. 2016. Attitudes toward Bisexual Men and Women among a Nationally Representative Probability Sample of Adults in the United States. *PloS one*, 11(10), e0164430. <https://doi.org/10.1371/journal.pone.0164430>.
 - Dodge, B., Schnarrs, P.W., Reece, M., Martinez, O., Goncalves, G., Malebranche, D., Van Der Pol, B., Nix, R., Fortenberry, J.D. 2013. Sexual behaviors and experiences among behaviorally bisexual men in the midwestern United States. *Arch Sex Behav*.42(2):247–56.
 - Doty, Nathan Daniel, Brian L. B. Willoughby, Kristin M. Lindahl, and Neena M. Malik. 2010. “Sexuality Related Social Support Among Lesbian, Gay, and Bisexual Youth.” *Journal of Youth and Adolescence*, 39(10):1134–47. <https://doi.org/10.1007/s10964-010-9566-x>
 - Dragon, C. N., Guerino, P., Ewald, E., & Laffan, A. M. 2017. Transgender Medicare Beneficiaries and Chronic Conditions: Exploring Fee-for-Service Claims Data. *LGBT health*, 4(6), 404–411. <https://doi.org/10.1089/lgbt.2016.0208>.
 - Dyar, C., Taggart, T. C., Rodriguez-Seijas, C., Thompson, R. G., Jr, Elliott, J. C., Hasin, D. S., & Eaton, N. R. 2019. Physical Health Disparities Across Dimensions of Sexual Orientation, Race/Ethnicity, and Sex: Evidence for Increased Risk Among Bisexual Adults. *Archives of sexual behavior*, 48(1), 225–242. <https://doi.org/10.1007/s10508-018-1169-8>.

■ England P, Mishel E, & Caudillo M. 2016. Increases in Sex with Same-Sex Partners and Bisexual Identity Across Cohorts of Women (but Not Men). *Sociological Science*, 3, 951-970. 10.15195/v3.a42.

■ Everett B.G., Schnarrs P.W., Rosario M., Garofalo R., Mustanski B. 2014. Sexual orientation disparities in sexually transmitted infection risk behaviors and risk determinants among sexually active adolescent males: results from a school-based sample. *Am J Public Health*. 104(6):1107-12.

■ Falhammar, H., Claahsen-van der Grinten, H., Reisch, N., Slowikowska-Hilczek, J., Nordenström, A., Roehle, R., Bouvattier, C., Kreukels, B.P.C. & Köhler B. 2018. "Health Status in 1040 Adults with Disorders of Sex Development (DSD): A European Multicenter Study." *Endocrine Connections* 7(3):466-78. <https://doi.org/10.1530/EC-18-0031>

■ Fallat, M. E. & Donahoe, P. K. 2006. Intersex genetic anomalies with malignant potential. *Current opinion in pediatrics*, 18(3), 305-311. <https://doi.org/10.1097/01.mop.0000193316.60580.d7>

■ Fileborn, B. 2012. Sexual violence and gay, lesbian, bisexual, trans, intersex, and queer communities. Australian Centre for the Study of Sexual Assault (ACSSA) Resource Sheet. Melbourne: Australian Institute of Family Studies. <http://ww3.aifs.gov.au/acssa/pubs/sheets/rs3/>

■ Fisher, D.G., Reynolds, G.L., Ware, M.R. & Napper, L.E. 2011. "Methamphetamine and Viagra Use: Relationship to Sexual Risk Behaviors." *Archives of Sexual Behavior*, 40(2):273-79. <https://doi.org/10.1007/s10508-009-9495-5>

■ Fokkema, T. and Kuiper, L. 2009. "The Relation Between Social Embeddedness and Loneliness among Older Lesbian, Gay, and Bisexual Adults in the Netherlands." *Archives of Sexual Behavior* 38(2):264-75. <https://doi.org/10.1007/s10508-007-9252-6>

■ Fraser, B., Pierse, N., Chisholm, E., & Cook, H. 2019. LGBTIQ+ Homelessness: A Review of the Literature. *International journal of environmental research and public health*, 16(15), 2677. <https://doi.org/10.3390/ijerph16152677>

■ Fredriksen-Goldsen, K. I., Emlen, C. A., Kim, H. J., Muraco, A., Erosheva, E. A., Goldsen, J. & Hoy-Ellis, C. P. 2013. "The Physical and Mental Health of Lesbian, Gay Male, and Bisexual (LGB) Older Adults: The Role of Key Health Indicators and Risk and Protective Factors." *The Gerontologist* 53(4):664-75. <https://doi.org/10.1093/geront/gns123>

■ Fredriksen-Goldsen, K. I., Kim, H. J., Shui, C., & Bryan, A. 2017. Chronic Health Conditions and Key Health Indicators Among Lesbian, Gay, and Bisexual Older US Adults, 2013-2014. *American journal of public health*, 107(8), 1332-1338. <https://doi.org/10.2105/AJPH.2017.303922>.

■ Fredriksen-Goldsen, K.I., Kim, H.J., Barkan, S.E., Muraco, A. & Hoy-Ellis, C.P. 2013. "Health Disparities Among Lesbian, Gay, and Bisexual Older Adults: Results From a Population-Based Study." *American Journal of Public Health*, 103(10):1802-9. <https://doi.org/10.2105/AJPH.2012.301110>

■ Friedman, M.R., Dodge, B., Schick, V., Herbenick, D., Hubach, R., Bowling, J., Goncalves, G., Krier, S., Reece, M. 2014. From bias to bisexual health disparities: Attitudes toward bisexual men and women in the United States. *LGBT Health*.1:309-18.

■ Garcia M.M. 2018. Sexual Function After Shallow and Full-Depth Vaginoplasty: Challenges, Clinical Findings, and Treatment Strategies- Urologic Perspectives. *Clin Plast Surg*. 45(3):437-446. <https://doi.org/10.1016/j.cps.2018.04.002>

■ Garland-Forshee, R. Y., Fiala, S. C., Ngo, D. L., & Moseley, K. 2014. Sexual orientation and sex differences in adult chronic conditions, health risk factors, and protective health practices, Oregon, 2005-2008. *Preventing chronic disease*, 11, E136. <https://doi.org/10.5888/pcd11.140126>.

■ Genke, J. 2004. "Resistance and Resilience: The Untold Story of Gay Men Aging with Chronic Illnesses." *Journal of Gay & Lesbian Social Services* 17(2):81-95. https://doi.org/10.1300/J041v17n02_05

■ Ghavami, N., Fingerhut, A., Peplau, L. A., Grant, S. K., & Wittig, M. A. 2011. Testing a model of minority identity achievement, identity affirmation, and psychological well-being among ethnic mi-

nority and sexual minority individuals. *Cultural Diversity and Ethnic Minority Psychology*, 17(1), 79-88.

■ Goldbach, J.T., Tanner-Smith, E.E., Bagwell, M. & Dunlap, S. 2014. "Minority Stress and Substance Use in Sexual Minority Adolescents: A Meta-Analysis." *Prevention Science*, 15(3), 350-63. <https://doi.org/10.1007/s11121-013-0393-7>

■ GrApSIA & Audí L. 2014. Past Experiences of Adults with Disorders of Sex Development. *Endocrine Development* [Internet]. S. KARGER AG; pp. 138-48. <https://doi.org/10.1159/000363639>

■ GrApSIA. 2015. Tratamiento y afrontamiento del SIA: una tarea compartida (Treating and dealing with AIS: a shared task). *Rev Esp Endocrinol Pediatr*. 6 Suppl(2), 28-34. <https://doi.org/10.3266/RevEspEndocrinolPediatr.pre2015.Nov.329>

■ Haas, A., Rodgers, P. & Herman, J. 2014. Suicide Attempts Among Transgender and Gender Non-Conforming Adults: Finding of the National Transgender Discrimination Survey. <https://doi.org/10.13140/RG.2.1.4639.4641>

■ Haley, S. and Kothary, V. 2016. Immigrant and International LGBT Health. https://doi.org/10.1007/978-3-319-19752-4_22

■ Hayman, B., Wilkes, L., Jackson, D. & Halcomb, E. (2013). 'De Novo lesbian families: legitimizing the other Mother', *Journal of GLBT Family Studies*, 9, 273-287, <https://doi.org/10.1080/1550428X.2013.781909>

■ Hembree, W. C., Cohen-Kettenis, P., Delemarre-van de Waal, H. A., Gooren, L. J., Meyer, W. J., 3rd, Spack, N. P., Tangpricha, V., Montori, V. M., and Endocrine Society 2009. Endocrine treatment of transsexual persons: an Endocrine Society clinical practice guideline. *The Journal of clinical endocrinology and metabolism*, 94(9), 3132-3154. <https://doi.org/10.1210/jc.2009-0345>.

■ Hočevár, A. 2014. Children in rainbow families. *Annual of Social Work*. 21. 83. <https://doi.org/10.3935/ljsr.v21i1.8>

■ Hoebeke P, Selvaggi G, Ceulemans P, De Cuypere G, T'Sjoen G, Weyers S, Decaestecker K, Monstrey S. 2005. Impact of sex reassignment surgery on lower urinary tract function. *Eur Urol*. 47(3):398-402. <https://doi.org/10.1016/j.eururo.2004.10.008>.

■ Huang, H., Wang, C. & Tian, Q. 2017. Gonadal tumour risk in 292 phenotypic female patients with disorders of sex development containing Y chromosome or Y-derived sequence. *Clinical endocrinology*, 86(4), 621-627. <https://doi.org/10.1111/cen.13255>

■ Hutaff-Lee, C., Cordeiro, L & Tartaglia, N. (2013). Cognitive and medical features of chromosomal aneuploidy. *Pediatric Neurology Part I*, 273-279. <https://doi.org/10.1016/b978-0-444-52891-9.00030-0>

■ Institute of Medicine (US) 2011. Committee on Lesbian, Gay, Bisexual, and Transgender Health Issues and Research Gaps and Opportunities. *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding*. Washington (DC): National Academies Press (US); 5, Early/Middle Adulthood. <https://www.ncbi.nlm.nih.gov/books/NBK64798/>

■ Jabson, J. M., Farmer, G. W., & Bowen, D. J. 2014. Stress mediates the relationship between sexual orientation and behavioral risk disparities. *BMC public health*, 14, 401. <https://doi.org/10.1186/1471-2458-14-401>

■ James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. 2016. The Report of the 2015 U.S. Transgender Survey. Washington, DC: National Center for Transgender Equality. <https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf>

■ Jeffries, W.L. 2010. HIV testing among bisexual men in the United States. *AIDS Educ Prev*. 2010; 22(4), 356-70.

■ Ji, J., Zöller, B., Sundquist, J. & Sundquist, K. 2016. Risk of solid tumors and hematological malignancy in persons with Turner and Klinefelter syndromes: A national cohort study. *International Journal of Cancer*, 139(4), 754-758. <https://doi.org/10.1002/ijc.30126>

■ Jones, T. 2016. The needs of students with intersex variations, *Sex Education*, 16(6), 602-618,

- <https://doi.org/10.1080/14681811.2016.1149808>
- Jones, T. 2018. Intersex Studies: A Systematic Review of International Health Literature. *SAGE Open*. <https://doi.org/10.1177/2158244017745577>
 - Jones, T. & Leonard, W. 2017. Health and wellbeing of people with intersex variations: background paper. Melbourne: Victorian Government Department of Health and Human Services. https://research-management.mq.edu.au/ws/portalfiles/portal/100001677/Health_and_wellbeing_of_people_with_intersex_variations.pdf.
 - Jones, T. Leonard, W., State of Victoria, Department of Health and Human Services. 2019. Health and wellbeing of people with intersex variations: information and resource paper: Department of Health and Human Services (Vic). <https://www2.health.vic.gov.au/about/populations/lgbti-health/health-of-people-with-intersex-variations>.
 - Jones, T., Hart, B., Morgan, C., Gavi, A., William, L. & Jayne, L. 2016. Intersex: Stories and Statistics from Australia. 10.1164/OBP.0089.
 - Jorm, A.F., Korten, A.E., Rodgers, B., Jacomb, P.A., Christensen, H. 2002. Sexual orientation and mental health: Results from a community survey of young and middle-aged adults. *British Journal of Psychiatry*. 180(5), 423-427.
 - Kamoun, M., Feki, M. M., Sfar, M. H. & Abid, M. 2013. Congenital adrenal hyperplasia: Treatment and outcomes. *Indian journal of endocrinology and metabolism*, 17(Suppl 1), S14–S17. <https://doi.org/10.4103/2230-8210.119491>
 - Kathrins, M. & Kolon, T. F. 2016. Malignancy in disorders of sex development. *Translational Andrology and Urology*, 5(5), 794–798. <https://doi.org/10.21037/tau.2016.08.09>
 - Katz-Wise, S.L., Rosario, M. & Tsappis, M. 2016. “Lesbian, Gay, Bisexual, and Transgender Youth and Family Acceptance.” *Pediatric Clinics of North America* 63(6), 1011–25. <https://doi.org/10.1016/j.pcl.2016.07.005>
 - Keuroghlian, A. S., Shtasel, D., and Bassuk, E. L. 2014. Out on the street: A public health and policy agenda for lesbian, gay, bisexual, and transgender youth who are homeless. *American Journal of Orthopsychiatry*, 84(1), 66–72. <https://doi.org/10.1037/h0098852>.
 - Kim, Hyun-Jun, & Karen I. Fredriksen-Goldsen. 2016. “Living Arrangement and Loneliness Among Lesbian, Gay, and Bisexual Older Adults.” *The Gerontologist* 56(3):548–58. <https://doi.org/10.1093/geront/gnu083>
 - Klein, C., & Gorzalka, B.B. 2009. Sexual functioning in transsexuals following hormone therapy and genital surgery: a review. *The journal of sexual medicine*, 6(11), 2922–2941. <https://doi.org/10.1111/j.1743-6109.2009.01370.x>
 - Knight, K. 2017. "I Want to Be Like Nature Made Me" Medically Unnecessary Surgeries on Intersex Children in the US.
 - Ko, J., King, T., Williams, L., Creighton, S. M. and Conway, G. S. 2017. Hormone replacement treatment choices in complete androgen insensitivity syndrome: an audit of an adult clinic. *Endocrine connections*, 6(6), 375–379. <https://doi.org/10.1530/EC-17-0083>.
 - Kosciw, J.G., Palmer, N.A., Boesen, M.J, Bartkiewicz, M.J., Greytak, E.A. & Gay Lesbian and Straight Education Network (Glsen). 2012. The 2011 National School Climate Survey: The Experiences of Lesbian, Gay, Bisexual and Transgender Youth in Our Nation’s Schools. Gay, Lesbian and Straight Education Network.
 - Kuhn, A; Hildebrand, R & Birkhaeuser, M. 2007. Do transsexuals have micturition disorders? *European journal of obstetrics, gynecology, and reproductive biology*. 131, 226-30. 10.1016/j.ejogrb.2006.03.019.
 - Lanciotti, L., Cofini, M., Leonardi, A., Bertozzi, M., Penta, L. & Esposito, S. 2019. Different Clinical Presentations and Management in Complete Androgen Insensitivity Syndrome (CAIS). *International journal of environmental research and public health*, 16(7), 1268. <https://doi.org/10.3390/ijerph16071268>.
 - Landers, S. J., Mimiaga, M. J., & Conron, K. J. 2011. Sexual orientation differences in asthma correlates in a population-based sample of adults. *American journal of public health*, 101(12), 2238–2241. <https://doi.org/10.2105/AJPH.2011.300305>.
 - Lawrence A. A. 2003. Factors associated with satisfaction or regret following male-to-female sex reassignment surgery. *Archives of sexual behavior*, 32(4), 299–315. <https://doi.org/10.1023/a:1024086814364>.
 - Lawrence A.A. 2005. Sexuality before and after male-to-female sex reassignment surgery. *Archives of sexual behavior*, 34(2), 147–166. <https://doi.org/10.1007/s10508-005-1793-y>.
 - Lhomond, B., Saurel-Cubizolles, M. J., Michaels, S., & CSF Group 2014. A multidimensional measure of sexual orientation, use of psychoactive substances, and depression: results of a national survey on sexual behavior in france. *Archives of sexual behavior*, 43(3), 607–619. <https://doi.org/10.1007/s10508-013-0124-y>.
 - Light, A., Wang, L.F., Zeymo, A. & Gomez-Lobo, V. 2018. “Family Planning and Contraception Use in Transgender Men.” *Contraception* 98(4), 266–69. <https://doi.org/10.1016/j.contraception.2018.06.006>
 - Liu, R.T., Walsh, R.F.L., Sheehan, A.E., Cheek, S.M. & Carter S.M. 2020. “Suicidal Ideation and Behavior Among Sexual Minority and Heterosexual Youth: 1995–2017.” *Pediatrics* 145(3), e20192221. <https://doi.org/10.1542/peds.2019-2221>
 - Looijenga, L. H., Hersmus, R., Oosterhuis, J. W., Cools, M., Drop, S. L. & Wolffenbuttel, K. P. 2007. Tumor risk in disorders of sex development (DSD). *Best practice & research. Clinical endocrinology & metabolism*, 21(3), 480–495. <https://doi.org/10.1016/j.beem.2007.05.001>
 - Lunn, M.R., Cui, W., Zack, M.M., Thompson, W.W., Blank, M.B. & Yehia, B.R. 2017. Sociodemographic Characteristics and Health Outcomes Among Lesbian, Gay, and Bisexual U.S. Adults Using Healthy People 2020 Leading Health Indicators. *LGBT health*, 4(4), 283–294. <https://doi.org/10.1089/lgbt.2016.0087>.
 - Mahfouda, S., Moore, J.K., Siafarikas, A., Hewitt, T., Ganti, U., Lin, A. & Zepf, F.D. 2019. Gender-affirming hormones and surgery in transgender children and adolescents. *The lancet. Diabetes & endocrinology*, 7(6), 484–498. [https://doi.org/10.1016/S2213-8587\(18\)30305-X](https://doi.org/10.1016/S2213-8587(18)30305-X).
 - Maimon, M.R., Sanchez, D.T., Albuja, A.F. & Howansky, K. 2019. Bisexual identity denial and health: Exploring the role of societal meta-perceptions and belonging threats among bisexual adults. *Self and Identity*. Advance online publication. <https://doi.org/10.1080/15298868.2019.1624275>.
 - Mains, L.M., Vakili, B., Lacassie, Y., Andersson, S., Lindqvist, A. & Rock, J.A. 2008. 17beta-hydroxysteroid dehydrogenase 3 deficiency in a male pseudohermaphrodite. *Fertility and sterility*, 89(1), 228.e13–228.e2.28E17. <https://doi.org/10.1016/j.fertnstert.2007.02.048>.
 - Marshal, M. P., Friedman, M.S., Stall, R., King, K.M., Miles, J., Gold, M.A., Bukstein, O.G. & Morse, J.Q. 2008. “Sexual Orientation and Adolescent Substance Use: A Meta-Analysis and Methodological Review.” *Addiction* 103(4):546–56. <https://doi.org/10.1111/j.1360-0443.2008.02149.x>
 - Mathy, R.M., Lehmann, B.A. & Kerr, D.L. 2003. Bisexual and transgender identities in a nonclinical sample of north Americans: Suicidal intent, behavioral difficulties, and mental health treatment. *Journal of Bisexuality*. 3(3–4), 93–109.
 - Matthews, D.D., & Lee, J.G. 2014. A profile of North Carolina lesbian, gay, and bisexual health disparities, 2011. *American journal of public health*, 104(6), e98–e105. <https://doi.org/10.2105/AJPH.2013.301751>.
 - Mayer, K.H. 2011. “Sexually Transmitted Diseases in Men Who Have Sex With Men.” *Clinical Infectious Diseases* 53(suppl_3):S79–83. <https://doi.org/10.1093/cid/cir696>
 - Mays, V. M., Juster, R. P., Williamson, T. J., Seeman, T. E., & Cochran, S. D. 2018. Chronic Physiologic Effects of Stress Among Lesbian, Gay, and Bisexual Adults: Results From the National Health and Nutrition Examination Survey. *Psychosomatic medicine*, 80(6), 551–563. <https://doi.org/10.1097/PSY.0000000000000600>

- MedlinePlus (2017) Mayer-Rokitansky-Küster-Hauser syndrome. <https://medlineplus.gov/download/genetics/condition/mayer-rokitansky-kuster-hauser-syndrome.pdf>
- Meltzer, T. 2016. Vaginoplasty procedures, complications and aftercare. UCSF Transgender Care. <https://transcare.ucsf.edu/guidelines/vaginoplasty>
- Mendonca, B.B., Inacio, M., Arnhold, I.J., Costa, E.M., Bloise, W., Martin, R.M., Denes, F.T., Silva, F.A., Andersson, S., Lindqvist, A., & Wilson, J.D. 2000. Male pseudohermaphroditism due to 17 beta-hydroxysteroid dehydrogenase 3 deficiency. Diagnosis, psychological evaluation, and management. *Medicine*, 79(5), 299–309. <https://doi.org/10.1097/00005792-200009000-00003>.
- Mercer, C.H., Hart, G.J., Johnson, A.M., Cassell, J.A. 2009. Behaviourally bisexual men as a bridge population for HIV and sexually transmitted infections? Evidence from a national probability survey. *Int J STD AIDS*. 20(2), 87–94.
- Merke D.P. & Poppas D.P. 2013. Management of adolescents with congenital adrenal hyperplasia. *Lancet Diabetes Endocrinol*. 1(4), 341-52. [https://doi.org/10.1016/S2213-8587\(13\)70138-4](https://doi.org/10.1016/S2213-8587(13)70138-4)
- Meyer, I. H. 2015. Resilience in the study of minority stress and health of sexual and gender minorities. *Psychology of Sexual Orientation and Gender Diversity*, 2(3), 209–213. <https://doi.org/10.1037/sgd0000132>.
- Miller, M., André, A., Ebin, J., & Bessonova, L. 2007. Bisexual health: An introduction and model practices for HIV/STI prevention programming. New York: National Gay and Lesbian Task Force Policy Institute, the Fenway Institute at Fenway Community Health, and BiNet USA.
- Mirbolouk, M., Charkhchi, P., Kianoush, S., Uddin, S.M.I., Orimoloye, O.A., Jaber, R., Bhatnagar, A., Benjamin, E.J., Hall, M.E., DeFilippis, A.P., Maziak, W., Nasir, K., Blaha, M.J. 2018. Prevalence and Distribution of E-Cigarette Use Among U.S. Adults: Behavioral Risk Factor Surveillance System, 2016. *Ann Intern Med*.169(7):429-38.
- Molix, L. and Bettencourt, B.A. 2010. Predicting Well-Being Among Ethnic Minorities: Psychological Empowerment and Group Identity. *Journal of Applied Social Psychology*, 40: 513-533. <https://doi.org/10.1111/j.1559-1816.2010.00585.x>.
- Moore, M. 2010. Chapter 7. Black and Gay in L.A.. In D. Hunt & A. Ramon (Ed.), *Black Los Angeles* (pp. 188-212). New York, USA: New York University Press. <https://doi.org/10.18574/9780814790922-009>.
- Mosher, W. D., Chandra, A., & Jones, J. 2005. Sexual behavior and selected health measures: men and women 15-44 years of age, United States, 2002. Advance data, (362), 1–55.
- National Alliance to End Homelessness. National recommended best practices for serving LGBT homeless youth. Washington, DC: 2009. Retrieved from <http://www.endhomelessness.org/library/entry/national-recommended-best-practices-for-serving-lgbt-homeless-youth>.
- National Senior Citizens Law Center, National Gay and Lesbian Task Force, Services & Advocacy for GLBT Elders, Lambda Legal, National Center for Lesbian Rights, and National Center for Transgender Equality. 2011. *LGBT Older Adults in Long-Term Care Facilities: Stories from the Field*.
- Örtqvist, L., Fossum, M., Andersson, M., Nordenström, A., Frisén, L., Holmdahl, G. and Norden-skjöld, A. 2017. Sexuality and fertility in men with hypospadias; improved outcome. *Andrology*, 5, 286-293. <https://doi.org/10.1111/andr.12309>
- Pachankis, J. E., and Bränström, R. 2019. How many sexual minorities are hidden? Projecting the size of the global closet with implications for policy and public health. *PloS one*, 14(6), e0218084. <https://doi.org/10.1371/journal.pone.0218084>
- Papadakis, G., Kandaraki, E. A., Tseniklidi, E., Papalou, O. and Diamanti-Kandarakis, E. 2019. Polycystic Ovary Syndrome and NC-CAH: Distinct Characteristics and Common Findings. A Systematic Review. *Frontiers in endocrinology*, 10, 388. <https://doi.org/10.3389/fendo.2019.00388>
- Papadopulos, N. A., Lellé, J. D., Zavlin, D., Herschbach, P., Henrich, G., Kovacs, L., Ehrenberger, B.,

- Kluger, A. K., Machens, H. G. and Schaff, J. 2017. Quality of Life and Patient Satisfaction Following Male-to-Female Sex Reassignment Surgery. *The journal of sexual medicine*, 14(5), 721–730. <https://doi.org/10.1016/j.jsxm.2017.01.022>
- Parliament of Australia – Senate Community Affairs Committees . 2012. The involuntary or coerced sterilisation of people with disabilities in Australia. Chapter 4. https://www.aph.gov.au/parliamentary_business/committees/senate/community_affairs/involuntary_sterilisation/sec_report/c04
- Patterson, J. G., and Jabson, J. M. 2018. Sexual orientation measurement and chronic disease disparities: National Health and Nutrition Examination Survey, 2009-2014. *Annals of epidemiology*, 28(2), 72–85. <https://doi.org/10.1016/j.annepidem.2017.12.001>
- Persson, D. I. 2009. Unique Challenges of Transgender Aging: Implications From the Literature. *Journal of Gerontological Social Work*, 52(6), 633–646. <https://doi.org/10.1080/01634370802609056>
- Peterson, C. M., Matthews, A., Copps-Smith, E. and Conard, L. A. 2017. Suicidality, Self-Harm, and Body Dissatisfaction in Transgender Adolescents and Emerging Adults with Gender Dysphoria. *Suicide & life-threatening behavior*, 47(4), 475–482. <https://doi.org/10.1111/sltb.12289><https://doi.org/10.1111/sltb.12289>
- Pieters, J. J., Kooper, A. J., van Kessel, A. G., Braat, D. D. and Smits, A. P. 2011. Incidental prenatal diagnosis of sex chromosome aneuploidies: health, behavior, and fertility. *ISRN obstetrics and gynecology*, 2011, 807106. <https://doi.org/10.5402/2011/807106>
- Porter, K.E., Brennan-Ing, M., Chang, S.C., Dickey, I.M., Singh, A.A., Bower, K.L, Witten, T.M. 2016. Providing Competent and Affirming Services for Transgender and Gender Nonconforming Older Adults, *Clinical Gerontologist*, <https://doi.org/10.1080/07317115.2016.1203383>
- Power & Control in Lesbian, Gay, Transgender & Bisexual Relationships. Building Safer Communities for Lesbian, Gay, Transgender, Bisexual and HIV-Affected New Yorkers © 2000. New York City Gay & Lesbian Anti-Violence Project. <https://vawnet.org/sites/default/files/materials/files/2016-08/LGBTPCWheel.pdf>
- Pratt, G., Gascoyne, K., Cunningham, K. & Tunbridge, A. 2010. “Human Immunodeficiency Virus (HIV) in Older People.” *Age and Ageing* 39(3):289–94. <https://doi.org/10.1093/ageing/afq009>
- Quam, J. K. & Whitford, G. S. 1992. “Adaptation and Age-Related Expectations of Older Gay and Lesbian Adults.” *The Gerontologist* 32(3):367–74. <https://doi.org/10.1093/geront/32.3.367>
- Rew, L., Young, C.C., Monge, M. & Bogucka, R. 2021. Review: Puberty blockers for transgender and gender diverse youth—a critical review of the literature. *Child Adolesc Ment Health*, 26: 3-14. <https://doi.org/10.1111/camh.12437>.
- Rodríguez M.F., Granda M.M. & González V. 2018. Gender Incongruence is No Longer a Mental Disorder. *J Mental Health & Clin Psychology*. 2(5): 6-8
- Rollè, L., Giardina, G., Caldarera, A. M., Gerino, E., & Brustia, P. 2019. "When intimate partner violence meets same sex couples: A review of same sex intimate partner violence": Corrigendum. *Frontiers in Psychology*, 10, Article 1706. <https://doi.org/10.3389/fpsyg.2019.01706>.
- Rosario, M., Schrimshaw, E. W., & Hunter, J. 2012. Risk Factors for Homelessness Among Lesbian, Gay, and Bisexual Youths: A Developmental Milestone Approach. *Children and youth services review*, 34(1), 186–193. <https://doi.org/10.1016/j.childyouth.2011.09.016>
- Ross, J. L., Roeltgen, D. P., Stefanatos, G., Benecke, R., Zeger, M. P., Kushner, H., Ramos, P., Elder, F. F. & Zinn, A. R. 2008. Cognitive and motor development during childhood in boys with Klinefelter syndrome. *American journal of medical genetics. Part A*, 146A(6), 708–719. <https://doi.org/10.1002/ajmg.a.32232>
- Ruel, E. & Campbell, R. T. 2006. “Homophobia and HIV/AIDS: Attitude Change in the Face of an Epidemic.” *Social Forces* 84(4):2167–78. <https://doi.org/10.1353/sof.2006.0110>

- Russell, S.T., & Toomey, R.B. 2012. “Men’s Sexual Orientation and Suicide: Evidence for U.S. Adolescent-Specific Risk.” *Social Science & Medicine* 74(4):523–29. <https://doi.org/10.1016/j.socscimed.2010.07.038>
- Ryan, C., Huebner, D., Diaz, R. M. & Sanchez, J. (2009). Family Rejection as a Predictor of Negative Health Outcomes in White and Latino Lesbian, Gay, and Bisexual Young Adults. *Pediatrics*, 123(1), 346–52. <https://doi.org/10.1542/peds.2007-3524>
- Saewyc, E., Skay, C., Richens, K., Reis, E., Poon, C. & Murphy, A. 2006. “Sexual Orientation, Sexual Abuse, and HIV-Risk Behaviors Among Adolescents in the Pacific Northwest.” *American Journal of Public Health*, 96(6):1104–10. <https://doi.org/10.2105/AJPH.2005.065870>
- Schoemaker, M. J., Swerdlow, A. J., Higgins, C. D., Wright, A. F., Jacobs, P. A. & UK Clinical Cytogenetics Group. 2008. Cancer incidence in women with Turner syndrome in Great Britain: a national cohort study. *The Lancet. Oncology*, 9(3), 239–246. [https://doi.org/10.1016/S1470-2045\(08\)70033-0](https://doi.org/10.1016/S1470-2045(08)70033-0).
- Schulberg, H.C., Bruce, M.L., Lee, P.W., Williams, J.W. & Dietrich, A.J. 2004. “Preventing Suicide in Primary Care Patients: The Primary Care Physician’s Role.” *General Hospital Psychiatry* 26(5):337–45. <https://doi.org/10.1016/j.genhosppsych.2004.06.007>
- Schuler, M.S., & Collins. R.L. 2019. “Early Alcohol and Smoking Initiation: A Contributor to Sexual Minority Disparities in Adult Use.” *American Journal of Preventive Medicine*, 57(6):808–17. <https://doi.org/10.1016/j.amepre.2019.07.020>
- Scott, R. L., Lasiuk, G. & Norris, C. 2016. The relationship between sexual orientation and depression in a national population sample. *Journal of clinical nursing*, 25(23-24), 3522–3532. <https://doi.org/10.1111/jocn.13286>
- Seil, K.S., Desai, M.M. & Smith. M.V. 2014. “Sexual Orientation, Adult Connectedness, Substance Use, and Mental Health Outcomes Among Adolescents: Findings From the 2009 New York City Youth Risk Behavior Survey.” *American Journal of Public Health*, 104(10):1950–56. <https://doi.org/10.2105/AJPH.2014.302050>
- Selvaggi G, Monstrey S, Ceulemans P, T'Sjoen G, De Cuypere G, Hoebeke P. 2007. Genital sensitivity after sex reassignment surgery in transsexual patients. *Ann Plast Surg*. 58(4):427-33. <https://doi.org/10.1097/01.sap.0000238428.91834.be>
- Sherer, I, Baum, J, Ehrensaft, D, Rosenthal, SM. 2015. Affirming gender: Caring for gender atypical children and adolescents. *Contemporary Pediatrics*. 32. 16-19.
- Shields, J.P., Whitaker, K., Glassman, J., Franks, H.M. & Howard, K. 2012. “Impact of Victimization on Risk of Suicide Among Lesbian, Gay, and Bisexual High School Students in San Francisco.” *Journal of Adolescent Health* 50(4):418–20. <https://doi.org/10.1016/j.jadohealth.2011.07.009>
- Shields, L., Zappia, T., Blackwood, D., Watkins, R., Wardrop, J. & Chapman, R. 2012. Lesbian, Gay, Bisexual, and Transgender Parents Seeking healthcare for Their Children: A Systematic Review of the Literature. *Worldviews on Evidence-Based Nursing*, 9: 200-209. <https://doi.org/10.1111/j.1741-6787.2012.00251.x>.
- Singh, J. C., Jayanthi, V. R. & Gopalakrishnan, G. (2008). Effect of hypospadias on sexual function and reproduction. *Indian journal of urology (IJU): journal of the Urological Society of India*, 24(2), 249–252. <https://doi.org/10.4103/0970-1591.40623>.
- Skakkebaek, A., Moore, P. J., Pedersen, A. D., Bojesen, A., Kristensen, M. K., Fedder, J., Laurberg, P., Hertz, J. M., Østergaard, J. R., Wallentin M. & Gravholt, C. H. 2017. The role of genes, intelligence, personality, and social engagement in cognitive performance in Klinefelter syndrome. *Brain and Behavior*, 7(3), e00645. <https://doi.org/10.1002/brb3.645>
- Skuse, D., Printzlau, F. & Wolstencroft, J. 2018. Sex chromosome aneuploidies. *Handbook of Clinical Neurology*, 355–376. <https://doi.org/10.1016/b978-0-444-63233-3.00024-5>

- Slowikowska-Hilczer, J., Szarras-Czapnik, M., Wolski, J. K., Oszukowska, E., Hilczer, M., Jakubowski, L., Walczak-Jedrzejowska, R., Marchlewska, K., Filipiak, E., Kaluzewski, B., Baka-Ostrowska, M., Niedzielski, J. & Kula, K. 2015. The risk of neoplasm associated with dysgenetic testes in pre-pubertal and pubertal/adult patients. *Folia histochemica et cytobiologica*, 53(3), 218–226. <https://doi.org/10.5603/FHC.a2015.0021>
- Smith, A. M., Rissel, C. E., Richters, J., Grulich, A. E., & de Visser, R. O. 2003. Sex in Australia: sexual identity, sexual attraction and sexual experience among a representative sample of adults. *Australian and New Zealand journal of public health*, 27(2), 138–145. <https://doi.org/10.1111/j.1467-842x.2003.tb00801.x>.
- Solar O. & Irwin A. 2010. A Conceptual Framework for Action on the Social Determinants of Health. Social Determinants of Health Discussion Paper 2 (Policy and Practice).
- Speiser, P. W., Arlt, W., Auchus, R. J., Baskin, L. S., Conway, G. S., Merke, D. P., Meyer-Bahlburg, H., Miller, W. L., Murad, M. H., Oberfield, S. E. and White, P. C. 2018. Congenital Adrenal Hyperplasia Due to Steroid 21-Hydroxylase Deficiency: An Endocrine Society Clinical Practice Guideline. *The Journal of clinical endocrinology and metabolism*, 103(11), 4043–4088. <https://doi.org/10.1210/jc.2018-01865>
- Steele L.S., Ross L.E., Dobinson C., Veldhuizen S. & Tinmouth J. 2009. Women's sexual orientation and health: Results from a Canadian population-based survey. *Women & Health*; 49(5):353-367.
- Tartaglia N., Howell S., Davis S., Kowal K., Tanda T., Brown M., Boada C., Alston A., Crawford L., Thompson T., van Rijn S., Wilson R., Janusz J. & Ross J. 2020. Early neurodevelopmental and medical profile in children with sex chromosome trisomies: Background for the prospective eXtraordinary babies study to identify early risk factors and targets for intervention. *Am J Med Genet Part C*. 184C: 428– 443. <https://doi.org/10.1002/ajmg.c.31807Tjepkema>, M. 2008. healthcare use among gay, lesbian and bisexual Canadians. *Health Rep*. 19(1):53-64.
- Tartaglia, N. R., Howell, S., Sutherland, A., Wilson, R & Wilson, L. 2010. A review of trisomy X (47,XXX). *Orphanet Journal of Rare Diseases*, 5(1) <https://doi.org/10.1186/1750-1172-5-8>
- Tyutyusheva, N., Mancini, I., Baroncelli, G.I., D’Elios, S., Peroni, D., Meriggiola, M.C. & Bertelloni, S. 2021. Complete Androgen Insensitivity Syndrome: From Bench to Bed. *International journal of molecular sciences*, 22(3), 1264. <https://doi.org/10.3390/ijms22031264>.
- Urology Care Foundation. 2021 Urology A-Z: Hypospadias. <https://www.urologyhealth.org/urology-a-z/h/hypospadias>
- van de Grift T.C, Elaut E., Cerwenka S.C., Cohen-Kettenis P.T., Kreukels B.P.C. 2018. Surgical Satisfaction, Quality of Life, and Their Association After Gender-Affirming Surgery: A Follow-up Study. *Journal of Sex & Marital Therapy*, (44)2, 138–148. <https://doi.org/10.1080/0092623X.2017.1326190>.
- Van Rijn, S. 2019. A review of neurocognitive functioning and risk for psychopathology in sex chromosome trisomy (47,XXY, 47,XXX, 47, XYY). *Current Opinion in Psychiatry*, 32(2), 79–84. <https://doi.org/10.1097/ycp.0000000000000471>
- Vrangalova, Z., & Savin-Williams, R. C. 2014. Psychological and physical health of mostly heterosexuals: a systematic review. *Journal of sex research*, 51(4), 410–445. <https://doi.org/10.1080/00224499.2014.883589>.
- Warne, G.L., Grover, S. & Zajac, J.D., 2005. Hormonal Therapies for Individuals with Intersex Conditions. *Treatments in Endocrinology*, 4(1), pp.19–29. <https://doi.org/10.2165/00024677-200504010-00003>
- World Health Organisation (WHO) 2021. I CD-11 for Mortality and Morbidity Statistics (Version:05/2021). <https://icd.who.int/browse11/l-m/en#/http%3a%2f%2fid.who.int%2fid%2fentity%2f577470983>
- Wu, L., Sell, R. L., Roth, A. M., & Welles, S. L. 2018. Mental health disorders mediate association of sexual minority identity with cardiovascular disease. *Preventive medicine*, 108, 123–128. <https://doi.org/10.1016/j.ypmed.2018.05.018>

doi.org/10.1016/j.ypmed.2018.01.003.

- Xavier J.M. 2000. Final report of the Washington Transgender Needs Assessment Survey. Survey of 252 transgendered and gender variant persons in Washington, DC, from September 1999 to January 2000 with regard to their access of routine, transgender-related and HIV-related healthcare and housing services. Unpublished draft.
- Ybarra, M.L., Rosario, M., Saewyc, E. & Goodenow, C. 2016. “Sexual Behaviors and Partner Characteristics by Sexual Identity Among Adolescent Girls.” *Journal of Adolescent Health*, 58(3):310–16. <https://doi.org/10.1016/j.jadohealth.2015.11.001>
- Zeeman, L. & Aranda, K. 2020. A Systematic Review of the Health and Healthcare Inequalities for People with Intersex Variance. *International journal of environmental research and public health*, 17(18), 6533. <https://doi.org/10.3390/ijerph17186533>
- Zhang, H., Pan, J., Ji, H., Wang, Y., Shen, W., Liu, L., Lu, G. and Zhou, Z. 2013. Long-term evaluation of patients undergoing genitoplasty due to disorders of sex development: results from a 14-year follow-up. *TheScientificWorldJournal*, 2013, 298015. <https://doi.org/10.1155/2013/298015> K. 2015. The DSM-5 Diagnostic Criteria for Gender Dysphoria. 10.1007/978-88-470-5696-1_4.

Chapter 6. — Local specifications

6

Helpful resources

LGBTIQA+ communities – Glossary of common terms. CFCA Resource Sheet. Australian Institute of Family Studies (2019).
<https://aifs.gov.au/cfca/publications/lgbtiq-communities>

ILGA Europe Glossary. ILGA Europe (2015).
https://www.ilga-europe.org/sites/default/files/glossary_october_2015_edition.pdf

LGBTQIA+ Glossary of Terms for healthcare Teams. The Fenway Institute – The National LGBT Health Education Center (2020).
<https://www.lgbtqihealtheducation.org/publication/lgbtqiaglossary-of-terms-for-health-care-teams/>

Glossary of LGBT Terms for healthcare Teams. The Fenway Institute – The National LGBT Health Education Center (2016).
https://www.lgbtqihealtheducation.org/wp-content/uploads/LGBT-Glossary_March2016.pdf

Glossary of Gender and Transgender Terms. The Fenway Institute – The National LGBT Health Education Center (2010).
https://fenwayhealth.org/documents/the-fenway-institute/handouts/Hand-out_7-C_Glossary_of_Gender_and_Transgender_Terms__fi.pdf

Lesbian, Gay, Bisexual, and Transgender Health. Centers for Disease Control and Prevention (CDC)
<https://www.cdc.gov/lgbthealth/index.htm>

APA Publications Related to LGBT Psychology
<https://www.apadivisions.org/division-44/resources/publications>

Appendix

