

REGIONAL OFFICE FOR EUROPE



# The health and well-being of men in the WHO European Region: better health through a gender approach





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#### ABSTRACT

Although declining, high levels of premature mortality among men in some countries of the WHO European Region and gaps between men within countries require specific attention. A growing evidence base on the effectiveness of gender-responsive approaches to men's health, and on the positive health impact gender equality policy has on men, need to be considered in relation to improving the health of men and women. Building on the guiding principles of the 2030 Agenda and Health 2020, and the interconnected nature of Sustainable Development Goals 3, 5 and 10, a strategy on the health and well-being of men in the WHO European Region will be considered by the 68th session of the WHO Regional Committee for Europe in September 2018. This report provides a background to the strategy and presents a snapshot of the evidence of the health issues men face and the underlying social determinants of health. It takes a special focus on the impact of gender norms and stereotypes on health while also looking at gender-responsive health system approaches for men's health, and the health impacts of gender equality policy and engagement of men in achieving gender equality goals.

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# Foreword

Men in the WHO European Region are living healthier and longer lives than before. The Region is setting an example through an impressive reduction of premature mortality from noncommunicable diseases (NCDs) and we are likely to achieve the United Nations Sustainable Development Goals (SDG) target on reducing premature mortality from NCDs by one third earlier than 2030.

Yet too many men die young in the Region. Although life expectancy of men has steadily increased in all countries in recent decades, we observe up to 17 years difference between the lowest- and highest-ranking country, and within-country differences remain large.

The higher risk for premature mortality for men compared to women and the large differences among men is not news. In fact, it has been observed in many countries for so long now that it is almost considered a natural phenomenon. It is not, and should not be regarded as such. This report goes behind the data to investigate the causes of the differences in more detail.

We know that biology alone cannot explain health inequities. Just as for women, men's behaviours, exposure to risk, health-seeking patterns and the responses they receive from the system are influenced by many factors. The places they live, their employment situations, their education, the gender norms of their communities and their social networks, among others, all exert an influence. We also know that men are not a homogeneous group; these factors will have different impacts depending on age, ethnicity, migration status, sexual orientation and gender identity.

With the adoption of the 2030 Agenda and the SDGs, governments have made clear the indivisible nature of economic, social and environmental development, and have reaffirmed their commitments to human rights and gender equality as being crucial for accelerating progress on all goals and targets. This means that other SDG targets will be important enablers of SDG 3, on health and well-being. In this context, SDG 5 on gender equality and SDG 10 on reducing inequalities within and between countries deserve specific focus.

This is the first time that the WHO Regional Office for Europe has produced a comprehensive overview of the health and well-being of men, and it does so from a gender perspective. This report builds on a wealth of knowledge on men's health and well-being but takes the analysis one step further through a consistent focus on how gender norms and notions of masculinities are shaping health outcomes for men and women.

The report presents an overview of men's health in Europe, identifying NCDs and their risk factors as by far the leading cause of mortality for men. The concepts of gender and masculinities are discussed, and connections with other social determinants of health are highlighted to provide

a deeper and more comprehensive understanding of the health and needs of men across key life stages and transitions, such as adolescence, fatherhood and retirement. The importance of recognizing gender-based barriers and designing gender-responsive health services and health promotion initiatives to effectively reach men is emphasized. An eye-opener on the impact of gender equality on men's health and well-being and the need to engage men to achieve genderequality goals is discussed through the perspective of the SDG 5 targets relating to care, prevention of violence against women, and sexual and reproductive health.

In advancing the European policy framework for health and well-being, Health 2020, and supporting Member States in realizing the integrated nature of Agenda 2030 and the SDGs, the WHO Regional Office for Europe is strengthening its focus on gender- and rights-based approaches to transformative progress for health and health equity. A strategy on women's health and well-being was adopted by European Member States in 2016, accompanied by the report Women's health and well-being in Europe: beyond the mortality advantage. This year, a strategy on the health and well-being of men will similarly be considered for adoption by the WHO Regional Committee for Europe, with this report informing the strategy.

The strategies on women's and men's health and well-being are complementary and provide the foundation for collaboration on gender-responsive action for health in the WHO European Region. Many initiatives have grown from these strategies already, and we at the Regional Office look forward to developing this area of work even further in the years to come.

> **Zsuzsanna Jakab** WHO Regional Director for Europe

# Acronyms

BMI	body mass index
BP	blood pressure
CIS	Commonwealth of Independent States
CVD	cardiovascular disease
DALY	disability-adjusted life-year
EU	European Union
EU15	countries belonging to the European Union before May 2004
EU28	countries belonging to the European Union after July 2013
GDP	gross domestic product
CHO	Global Health Observatory
HBSC	Health Behaviour in School-aged Children (study/survey)
IMAGES	International Men and Gender Equality Survey
ISO	International Organization for Standardization
LGBTI	lesbian, gay, bisexual, trans, intersex
NCD	noncommunicable disease
NEET	not in education, employment or training
NGO	nongovernmental organization
NMS13	new Member States joining the European Union since 2004
OECD	Organisation for Economic Co-operation and Development
OOP	out-of-pocket expenditure
PISA	Programme for International Student Assessment (survey)
SDG	(United Nations) Sustainable Development Goal
SEEHN	South-eastern Europe Health Network
STEPS	WHO STEPwise approach to noncommunicable disease risk-factor surveillance
STI	sexually transmitted infections
ТВ	tuberculosis
UNDESA	United Nations Department of Economic and Social Affairs, Population Division
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund

# Introduction Methodology

Summary outline of the report



# Introduction

In recent years, the health and well-being of men has received increasing attention in the WHO European Region. A key trigger for this attention is the high level of premature mortality among men, particularly in the eastern part of the Region. Life expectancy at birth in males in countries of the Region ranged from 64.7 to 81.2 years in 2016, while healthy life expectancy ranged from 58.7 to 72.4 years. Although levels of premature mortality are improving slowly in all countries, variations between the eastern and western parts of Europe remain high. Similar differences also exist within countries between men from different socioeconomic backgrounds.

The focus on men's health has also been driven by a growing body of evidence that provides a better understanding of how gender intersects with social, economic, environmental, political and cultural determinants of health, influencing exposure to risk factors and interactions with health systems. In addition, the increased engagement of civil society on improving men's health and on the important role of men in the gender equality agenda calls for explicit commitment and action.

The United Nations 2030 Agenda for Sustainable Development provides a solid framework for promoting action aimed at reducing premature mortality among men and improving men's mental health and well-being through the achievement of the Sustainable Development Goals (SDGs). Reduced gender inequalities are both a driver and an accelerator of progress towards all the SDGs and are therefore a central component of the solutions to sustainable development.

This report is based on these global and regional commitments and aims to review evidence on key issues on the health and well-being of men from a gender and social determinants of health perspective. It was developed in the context of the consultation process to develop the European strategy for the health and well-being of men in the WHO European Region that will be discussed by the 68<sup>th</sup> session of the WHO Regional Committee for Europe in September 2018.

The report serves to inform and support the strategy's recommendations and is based on priorities and gaps identified during consultations with countries, experts, partners and civil society.

The objectives are to provide evidence that allows the identification of recommendations to Member States and stakeholders to:

• reduce the premature mortality of men from noncommunicable diseases (NCDs) and unintentional and intentional injuries;

- reduce inequalities in physical and mental health and well-being of men of all ages within countries and throughout the Region; and
- improve gender equality by transforming structures and policies that engage men in key areas such as self-care, fatherhood, unpaid care, preventing violence, and sexual and reproductive health.

Reducing inequities in the Region and improving gender equality are complementary objectives that are well grounded in the principles and values of the umbrella policy framework for health and well-being in the WHO European Region, Health 2020.

#### Methodology

The report presents a snapshot of key health issues for men, and provides an analysis of the causes of ill health in men and the responses they receive from the health system. It also looks at the governance of men's health priorities in the context of gender equality goals, with a special focus on policy coherence and the SDGs targets. It does not pretend to provide a comprehensive analysis of the state of men's health in the Region.

Data presented in the report are largely drawn from WHO databases and reports, and publications from the United Nations, other agencies and regional organizations. More in-depth analysis of the impact of intersections between gender and other determinants of health has been supported by articles published in scientific journals identified through literature reviews and suggestions by experts. Specific reviews were undertaken by WHO collaborating centres, WHO technical programmes and experts.

Although in some cases the report compares men with women, making a gender comparison is not the aim. Comparison is used to illustrate the impact of gender and intersections with other determinants, and to identify gender biases or gaps in provision of care or access to resources. Data for both sexes are provided when disaggregation is not available.

The framework for reviewing evidence was based on the Role of Gender as a Social Determinant of Health framework developed by the Women and Gender Equity Knowledge Network of the WHO global Commission on Social Determinants of Health (Sen et al., 2007) and adapted to include the concept of masculinities.

#### Summary outline of the report

Chapter 1 presents an epidemiological snapshot of men's health in the European Region, including data on life expectancy, burden of disease, main risk factors and well-being. It looks at averages, trends and differences among countries and across age groups. An analysis of the Global Burden of Disease justifies the focus on NCDs and external causes (traffic injuries, suicide and violence).

Chapter 2 looks at the intersections between gender and social and economic, cultural and environmental determinants and how these might increase exposure to risk factors and vulnerability among men. It introduces the concept of masculinities applied to public health and describes evidence supporting this approach. The analysis is done through a life-course approach focusing on special life stages. It also looks at the impact of the intersections between masculinities and forms of exclusion and discrimination.

Chapter 3 aims to increase understanding of how men's health needs, healthseeking behaviour and the responses of health systems are influenced by gender norms and roles, and intersections with other determinants of health.

Chapter 4 shows how improving the health and well-being of men and contributing to gender equality are complementary objectives that require changes in governance for health. It focuses on the need for policy coherence in health and in gender equality policies, on the accountability framework provided by the SDGs to promote and monitor the engagement of men in gender equality, and on specific mechanisms to achieve transformative change. 1 Health and well-being of men in Europe: highlights through the life-course

Men's life expectancy across the Region: progress with remaining gaps

What are the causes of ill health for men?

Main risk factors for NCDs Well-being



# 1 Health and well-being of men in Europe: highlights through the life-course

Men's health has received increasing attention in the WHO European Region over recent years. One of the triggers for this attention has been the high level of premature death (death occurring between the ages of 30 and 69 years). Although levels of premature mortality are improving slowly in all countries, variations between the eastern and western parts of the Region remain high, with higher levels of premature mortality generally observed in eastern parts. Similar differences also exist within countries and between men from different socioeconomic backgrounds.

This chapter presents an epidemiological snapshot of the health status of men in the European Region, including data on life expectancy, burden of disease, main risk factors and well-being. It describes trends and differences between countries, with a special focus on premature mortality and its causes. Differences within countries and comparisons between women and men across the life-course are presented in greater detail in subsequent chapters to illustrate intersections between gender and socioeconomic inequalities. The following analysis draws largely from available data from WHO, the Institute for Health Metrics and Evaluation, the European Union (EU) and databases and publications from other United Nations agencies.



## Men's life expectancy across the Region: progress with remaining gaps

In the mid-1990s, many countries in the Region experienced a health crisis that had a profound demographic, economic and political impact on men of working age (WHO, 2018a). The overall picture in the last few decades has been more positive, with life expectancy of men steadily increasing in all countries in the Region (Fig. 1.1). This has also meant a reduction in the gender mortality gap, mainly due to steeper gains in male life expectancy in the Commonwealth of Independent States (CIS) (WHO Regional Office for Europe, 2015a).

Despite these positive signs, the differences in estimated life expectancy at birth for men

#### Source: WHO Regional Office for Europe (2018a).

across countries in the Region presented in Fig. 1.2 remain large. More than 17 years difference between the lowest (64.7 years in Turkmenistan) to the highest (81.2 years in Switzerland) represents a significant gap. The group of countries with the highest life expectancy rates, of up to 75 years and above, include mainly western European and Nordic countries, while countries from the eastern part of the Region have the lowest rates. Differences in the risk of dying for 30-year-old men across the Region are also big, being much higher for men living in the eastern part of the Region than in the western part (WHO Regional Office for Europe, 2014a).



Fig. 1.2.

The picture is quite similar when using healthy life expectancy at birth as an indicator (Fig. 1.3). Although healthy life expectancy has been rising for men in all European countries, the gaps between countries remain significant, with more than 13 years difference between those with the highest and lowest estimates.

In addition to differences between countries in the Region, variations in life expectancy and healthy life expectancy are also seen at subnational levels. Growing evidence about these gaps points to the impact of wider social and economic determinants of health, including gender norms and roles; these will be explored later in this report.



Healthy life expectancy for men in countries of the WHO European Region, 2016

Healthy life expectancy Years in ill health



## What are the causes of ill health for men?

Overall, the burden of disease for men of all ages in Europe, expressed through disability-adjusted life-years (DALYs), fell by 9% between 2007 and 2016 (World Bank, 2017a). The burden from injuries and communicable diseases declined dramatically, by 20% and 22% respectively, but the change in DALY rates for NCDs was not significant over that time.

Fig. 1.4 clearly highlights the role of coronary heart diseases and mental health conditions in the burden of disease for men.

# NCDs and injuries

Between 2000 and 2015, NCDs and injuries were by far the leading cause of death for men in Europe (WHO Regional Office for Europe, 2016a). In 2015, they accounted for over 4 million deaths (86% of all deaths), primarily due to cardiovascular diseases (CVDs), cancers, diabetes and respiratory diseases. Of these four causes, deaths due to all but cancer declined between 2000 and 2015 (WHO, 2016a). These declines were due to a combination of reduction in certain risk factors and improvements in treatments. The prevalence of CVD continues to increase, and inequalities between and within countries persist. CVDs are the main burden of morbidity, accounting for 36.4 million DALYs lost in men (European Heart Network, 2017).

#### Fig. 1.4.



\*The former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO). Source: Institute for Health Metrics and Evaluation (2018)

NCD-related mortality occurs at an earlier age in central Asia and eastern Europe compared to western Europe. In the eastern part of the Region, 37% of NCD-related deaths occur before the age of 60 years, compared to just 13% in western Europe.

Fig 1.5 shows that CVDs have the highest level of variation between countries and are the main reasons for increased and varied premature morality rates across Europe.

Fig. 1.6 shows the probability of premature death from NCDs by broad cause in countries in the Region. Of all NCDs, CVD is responsible for most premature deaths. The green lines in the figure follow the probability of dying from CVDs in two groups of countries. The lower line is extended to show the rates in

#### Fig. 1.5.

Mortality from CVDs per 100 000 men aged 0–64, latest available data



Source: WHO Regional Office for Europe (2018a).

countries with lower mortality, and the upper line is fitted with the values of high-mortality countries. The triangular area created by the two green lines demonstrates the excess number of men dying from CVDs in high-mortality countries. It could be argued that these rates could be reduced to the level of the lower green line; this should be achievable, as many countries in the Region have already demonstrated. Many men in the Region lose their lives prematurely from CVDs in countries ranked on the right-hand side of the figure, which is unacceptable and can easily be prevented.

After CVDs, cancer is the second most common NCD in the European Region contributing to the disease burden among men. Cancer is in many cases avoidable, and early detection and treatment substantially increases the chance of survival. The most common cancer among European men in 2012 was prostate cancer, followed by cancers of the lung and colorectum (Fig. 1.7).

Prostate, lung and colorectal cancers are generally among the most common forms of cancer for individual countries, although there are noticeable differences across countries (Stewart & Wild, 2014). Incidence of prostate cancer is by far the most variable across the European Region, from age-standardized rates of less

10

#### Probability of premature mortality from NCDs for men in countries of the WHO European Region, latest available data 30 25 Unconditional probability of dying (%) 2000 20 15 ..... 10 ٠ \*\*\*\*\*\*\*\*\* ×× 4 0 Switzerland Norway Spain San Marino Israel France Iceland Belgium Portugal United Kingdom Austria Greece Estonia Lithuania Bulgaria Tajikistan Uzbekistan Kyrgyzstan Belarus Ukraine Turkmenistan Luxembourg Malta Ireland Finland Croatia Serbia Hungary Romania azakhstan Azerbaijan Latvia Republic of Moldova **Russian Federation** Vetherlands Italy Sweden Cyprus Turkev lovakia Poland MKD Armenia Aontenegro Georgia Denmark lovenia Albania Czechia Bosnia and Herzegovine Germany Circulatory diseases Cancers ٠ × Chronic respiratory diseases +Diabetes <sup>a</sup> The former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO). Source: WHO Regional Office for Europe (2018a).

#### Fig. 1.6.

#### Fig. 1.7.

Age-standardized incidence rate of cancers among male population in the WHO European Region, per 100 000, 2012



than 2.5 cases per 100 000 (Tajikistan, Turkmenistan and Uzbekistan) to more than 110 per 100 000 (Ireland, Norway and Sweden). These important differences are mainly explained by differences in screening practices and underreporting. Countries that currently practise prostate-specific antigen screening (or those that were practising it until recently) display much higher incidence.

Chronic respiratory diseases are among the major causes of premature adult deaths worldwide (WHO, 2014a). Prevalence of chronic respiratory diseases among males increased in most countries of the Region between 2000 and 2016 (Fig. 1.8), but a decrease in prevalence among males has been recorded in the past decade in some countries (Belgium, Ireland, Luxembourg, Switzerland, Ukraine and the United Kingdom).

Injuries are the second leading cause of premature mortality and disability among men in the Region. Differences across the Region are striking, with the Russian Federation, Lithuania, Belarus, Ukraine, Kazakhstan, Latvia and the Republic of Moldova accounting for an overwhelming 44.6% of the total burden caused by injuries in the Region (World Bank, 2017a). The same eastern European countries have the highest DALY rates and levels of alcohol consumption among men aged between 15 and 79 years.



Fig. 1.9 shows the latest available data for death rates for the major types of injuries in men. The main causes of deaths from injuries among males in the Region were unintentional injuries (including roadtraffic) (41%), and self-harm (suicide) and interpersonal violence (21%). Some classification systems include "self-harm" under the category of injuries, while others classify it under "mental health"; it is not always possible to disaggregate these data further, so it is important to consider variations in classifying diseases when interpreting.

About three-quarters of all road-traffic deaths occur among young men under the age of 25 (WHO, 2017a). Injuries (roadtraffic injuries, poisoning, drowning and fire) are the leading cause of death in male children and adolescents aged 5–19 years (Eurosafe, 2008).

#### Fig. 1.9.



Mortality due to three major types of intentional and unintentional injuries in men in the WHO European Region, latest available data

Source: calculations from the WHO European Office for the Prevention and Control of Noncommunicable Diseases, using the WHO Mortality Database.

# Mental ill health

Mental and behavioural disorders, including substance abuse, are among the main public health challenges in the European Region owing to their high prevalence and disabling consequences, and low rates of service access, uptake and coverage. Forty million people live with depression, which is a major risk factor for suicide (WHO, 2018a). Most mental health and behavioural problems have their onset in adolescence or early adulthood, and importantly are influenced by a range of social, cultural and environmental factors that are explored in Chapter 2.

Self-harm and suicide comprise a significant cause of death and disease burden among men in the Region (WHO, 2018a): 127 882 deaths were attributed to selfharm and suicide in 2015, equivalent to a crude rate of 14.1 deaths per 100 000 population, which is the highest rate among all WHO regions.

Fig. 1.10 shows that suicide rates vary substantially between countries, from a low of five to a high of nearly 50 per 100 000 population, a ten-fold difference. Many individual-, social- and societal-level factors contribute to self-harm and

suicide. Individual-level factors include harmful use of alcohol, community-level factors include exposure to adversity and isolation, and societal-level factors include limited access to health services (WHO, 2014b).



#### Sexual and reproductive health

In general, little or no systematic information is available for several important aspects of sexual and reproductive health, such as prevalence of infertility, quality of services or the sexuality-related well-being of the population (WHO Regional Office for Europe, 2016b). Information is even more scarce for men's sexual and reproductive health issues, although men aged 25–49 are involved in more than 2.8 million pregnancies each year, resulting in 1.6 million births and more than 1.2 million abortions (WHO Regional Office for Europe, 2016b).

Although reporting and quality of data are weak, rates of sexually transmitted infections (STIs) in the Region are quite high, particularly among young, poor and minority men, and are responsible for an enormous burden of morbidity and mortality because of their effects on reproductive and child health and their role in facilitating the transmission of HIV infection (Workowski et al., 2015).

Data on male infertility are collected less often than for female infertility. Although based on extrapolation, the prevalence estimate for male infertility in Europe is 7.5%, with higher prevalence of 8–12% in central and eastern Europe (Agarwal et al., 2015). Mumps may result in infertility; of all males who get mumps-related orchitis, an estimated one in 10 will experience a drop in their sperm count. Vaccination against mumps is the main preventative health-systems action to address this issue (NHS Choices, 2018).

Genital tract infection with gonorrhoea has been shown to be significantly more common in men who are infertile than those who are fertile (Abusarah et al., 2013), and infection with HIV is known to reduce male fertility through several mechanisms (Kushnir & Lewis, 2011). While chlamydia's association with infertility in women is well established, its effect on male fertility is less clear, with studies conflicting over whether sperm quality is altered (Brookings et al., 2013). There is some evidence for an association between male infertility and other STIs, such as mycoplasma, human papillomavirus and herpes simplex (Gimenes et al., 2014). All STIs may negatively affect male sexual function and desire due to uncomfortable symptoms or psychological distress (Brookings et al., 2013).

# Infectious diseases

Tuberculosis (TB), HIV and viral hepatitis are three of the preventable communicable diseases with the highest burden of disease and mortality in the Region. Despite their moderate overall burden compared to NCDs, there are worrying trends in the Region.

The European Region is the only region in the world where HIV incidence continues to rise (Fig 1.11). New HIV diagnoses in 2016 in countries that provided data by sex<sup>1</sup> resulted in a rate of 7.7 per 100 000 population, but for men, the rate was 11.1 (European Centre for Disease Prevention and Control & WHO Regional Office for Europe, 2017). Some countries in the western part of the Region see decreases in new HIV diagnoses, particularly among men having sex with men, resulting from a combination of HIV prevention, diagnostics and treatment strategies.

The overall number of new TB cases is decreasing, but the progress achieved is threatened by an alarming increase in the spread of drug-resistant strains of TB and an increase in co-infections with HIV (European Centre for Disease Prevention and Control & WHO Regional Office for Europe, 2018).

Viral hepatitis, although largely unnoticed until recently, is also responsible for an estimated 171 000 deaths a year, mostly due to consequences of chronic hepatitis B and C infections such as cirrhosis and liver cancer (WHO Regional Office for Europe, 2018b). Although modes of transmissions are different, men are highly affected by HIV, TB and viral hepatitis.

<sup>&</sup>lt;sup>1</sup> Data provided from the 53 WHO European Region Member States minus the Russian Federation, Turkmenistan and Uzbekistan.

#### Fig. 1.11.



# HIV diagnoses in males in countries of the WHO European Region per 100 000 population, 2007 and 2016

# Main risk factors for NCDs

The largest share of the burden of disease among men in 2016 was caused by five major risks: dietary risks, tobacco, raised systolic blood pressure (BP), and alcohol and drug use. Together, they account for about 90% of DALYs in Europe. A broad body of evidence has allowed an understanding of the ways in which an individual's behaviour affects their metabolic risk factors and their risk for NCDs to develop. This information, in turn, has enabled the development of scoring cards such as the WHO PEN Risk (WHO, 2013a), the ESC SCORE (European Society of Cardiology, 2018), the Framingham Risk Score (Lloyd-Jones et al., 2004), the QRISK score (Hippisley-Cox et al., 2007) and cardiovascular risk prediction cards (WHO & International Society of Hypertension, 2007). These tools show links between risk factors and NCD outcomes. Fig. 1.12 summarizes the key behavioural and metabolic risk factors and their causal pathway.

The NCD individual risk factors can be categorized in two main groups: behavioural and metabolic. Behavioural risk factors include unhealthy diet, tobacco, alcohol and physical inactivity. These lead to metabolic risk factors, such as raised BP,<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Raised BP: systolic BP => 140 mmHg and/or diastolic BP => 90 mmHg.

#### Fig. 1.12.

The impact of behavioural risk factors on NCDs: causal pathways



Source: calculations from the WHO European Office for the Prevention and Control of Noncommunicable Diseases, adapted from Scarborough P, Harrington RA, Mizdrak A, Zhou LM, Doherty A (2014). The Preventable Risk Integrated ModEl and its use to estimate the health impact of public health policy scenarios. Scientifica (Cairo) 748750. doi:10.1155/2014/748750.

high cholesterol,<sup>3</sup> raised blood sugar<sup>4</sup> and overweight.<sup>5</sup> It is important to describe the burden of these risk factors to explain the underlying causes of NCDs.

Individual risk factors are also influenced by sex, age and structural and social determinants of health, including gender norms and roles affecting expectations of masculinities and femininities (Chapter 2). In addition, one fifth of all deaths in the Region, particularly from cardiovascular and respiratory diseases and

<sup>&</sup>lt;sup>3</sup> High cholesterol: => 5.0 mmol/l.

<sup>&</sup>lt;sup>4</sup> Raised blood sugar: fasting plasma glucose value => 7.0 mmol/l (126 mg/dl) or on medication.

<sup>&</sup>lt;sup>5</sup> Overweight: body mass index (BMI)  $\ge$  25 kg/m2.

cancers, are attributable to environmental exposures, such as air pollution, and chemical and physical agents (WHO Regional Office for Europe, 2016a).

Alcohol and drug use was the leading risk factor for men in eastern Europe in 2016, being associated with 23.7% of the disease burden, primarily due to mental and substance use disorders, and cirrhosis and other chronic liver diseases (Fig. 1.13). In the remaining countries of the Region, alcohol and drug use was not the leading risk factor. The leading risk factor for central Asian countries was dietary risk, which accounted for 17.2% of total DALYs, while its contribution remained very high in the other subregions.

The leading metabolic risk factor (in terms of years of healthy life lost) among men in European Region countries was raised systolic BP, followed by high BMI in central Asia and central and western Europe and high total cholesterol in eastern Europe (Fig. 1.14).

Raised BP, tobacco-smoking (including second-hand smoke), alcohol use and diet low in fruits were among the top-five risk factors for men aged 50–69 years and those older than 70 in 1990 and 2010, accounting for a large proportion of disease burden in both age groups. Globally, raised BP accounted for more than 20% of all health loss in men aged 70 years and older in 2010, and around 15% in those aged 50–69 years. Tobacco-smoking, including second-hand smoke, accounted for more than 10% of global disease burden in each of these age groups in 2010.



Source: Institute for Health Metrics and Evaluation (2018).

Source: Institute for Health Metrics and Evaluation (2018).

The WHO STEPwise approach to NCDs risk-factor surveillance (STEPS) is a simple, standardized method for collecting, analysing and disseminating data on NCDs and its risk factors in WHO Member States.

Risk factors for NCDs are usually clustered and are not evenly distributed in the population. This means that, for example, people who consume alcohol excessively also tend to smoke more, be overweight and have raised BP levels. The risk of CVDs is therefore not distributed uniformly, but tends to be extravagated in a subset of the population. As STEPS is an integrated riskfactor survey, measuring several risk factors at once, the proportion of the population that simultaneously has three or more risk factors can be examined. Fig. 1.15.



Proportion of males aged 18–69 years with concurrent prevalence of three or more NCD risk factors, selected countries with recent STEPS survey

Source: calculations from the WHO European Office for Prevention and Control of Noncommunicable Diseases, using national STEPS surveys conducted between 2011 and 2017.

Between 2011 and 2017, the highest proportion of males with this so-called clustering of risk factors<sup>6</sup> – concurrent presence of three or more NCD risk factors – was observed in Turkey, Azerbaijan and Belarus (Fig. 1.15).

# Smoking

According to data from 2016, smoking was responsible for 1 million deaths per year among men in the European Region (Drope et al., 2018).

Tobacco use remains a major risk factor, via lung cancer in particular, but is also responsible for other serious illnesses (CVD, emphysema and bronchitis) as well as being linked to sperm abnormalities and impotence (Sharma et al., 2016). Smoking causes different types of cancer, including lung, stomach, oesophageal and bladder (International Agency for Research on Cancer, 2004). Second-hand smoke can cause lung cancer and heart disease in adult non-smokers, as well as causing or exacerbating respiratory problems (WHO, 2017b). Accidental death or injury can also be caused by fires that might result from smoking (Centre for Public Health, 2011).

<sup>&</sup>lt;sup>6</sup> In STEPS, the presence of several risk factors is examined concurrently. In this analysis, the following risk factors are included: current daily smoking; less than five servings of fruit and/or vegetables per day; not meeting WHO recommendations on physical activity for health (< 150 minutes of moderate activity per week, or equivalent); overweight or obese (BMI ≥ 25 kg/m2); and raised BP (systolic BP ≥ 140 and/or diastolic BP ≥ 90 mmHg or currently on medication for raised BP).

Fig. 1.16 shows country-specific male smoking rates in the Region, according to the most recent available data. These range from 15.2% in Iceland (a 3% decrease compared to 2013) to 58.3% in the Russian Federation (a 1% decrease). The average smoking rate for males in the Region (crude, adjusted) was 37% in 2015; half of the male population in some countries smoke.



There are differences in male smoking rates by age. The 2014 Health Behaviour in School-aged Children (HBSC) report (Inchley et al., 2016) shows that although substance use among adolescents has been decreasing since 2002 (Hublet et al., 2005; de Looze et al., 2015), tobacco use among adolescents is increasing in the Region, and in some countries (such as Czechia, Latvia and Lithuania) is very similar to that of adults. The percentage of 15-year-old boys who smoke at least once a week ranges from a low of 5% in Armenia to a high of 51% in Greenland. Smokeless tobacco use was highest among young men in Finland, at 12.7%, in 2012 (WHO, 2017c).

Large and widening inequalities in men's tobacco consumption (WHO, 2010a) exist both within countries (such as between groups of men by social class and in men with mental health conditions) (WHO Regional Office for Europe, 2013a, 2014b) and between countries (the differences in male smoking rates between eastern and western parts of the Region remain high). Globally, being born male has been the highest predictor of tobacco use (WHO Regional Office for Europe, 2015b). Children from poor households in some countries are frequently employed in tobacco farming to provide family income. These children are especially vulnerable to so-called green tobacco sickness, which is caused by nicotine being absorbed through the skin from handling wet tobacco leaves (WHO, 2017b). In 2012, tobacco was being cultivated and harvested in several WHO European Member States, with the largest producers being Turkey, Greece, Bulgaria, Italy, Spain and Poland (Drope et al., 2018).

# Alcohol and drugs

The WHO European Region has the highest consumption levels of alcohol in the world (WHO, 2014c), and eastern European countries have the highest proportions of males with alcohol-use disorders. Male alcohol consumption among the 51 WHO European Region Member States for which data were available for 2016 (Fig. 1.17) ranged from 1.5 litres of pure alcohol per capita per annum in Azerbaijan to 25.2 litres in the Republic of Moldova.

Estimates of heavy episodic drinking, defined as the proportion of people drinking 60 grams or more of pure alcohol on at least one occasion in the last 30 days, varied between countries. Age-standardized prevalence of heavy episodic drinking ranged from 2.9% in Turkey to 73.4% in Lithuania (Fig. 1.17).

Some countries have relatively low levels of total alcohol consumption among men, while heavy episodic drinking is more prevalent. In other countries, total levels of alcohol consumption are high, but levels of heavy episodic drinking are low.

Alcohol consumption caused about 1.6 million deaths in 2016, of which 73.6% occurred among men. The major contributors to the alcohol-attributable disease burden were alcohol-related violence, injuries, cancers, and haemorrhagic and ischaemic strokes. The highest level of lost DALYs attributed to alcohol-related disease was observed in eastern Europe. The contribution of alcohol in DALYs lost was less significant in most countries of western Europe and central Asia (World Bank, 2017a), although in some European countries, such as Portugal, Luxembourg and France, DALYs lost due to alcohol exceeded the average European level.

As was mentioned above, countries with high levels of alcohol consumption are also among those with the highest death rates from injury (World Bank, 2017a). Alcohol consumption contributes to road injuries and self-harm injuries among young adults. It is estimated that around 40% of all driving-related injuries among men are attributed to alcohol consumption (Eurosafe, 2008).

Alcohol consumption in adolescent boys varies among subregions. While 8% of adolescent boys in EU pre-2004 countries reported drinking at least once a week,

Fig. 1.17.

Total alcohol consumption and heavy episodic drinking among men, selected countries, 2016



<sup>a</sup>The former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO). Source: WHO (2018d).

the figure in SEEHN countries is 17%. On average, about 16% of 15-year-old boys report drinking alcohol at least once a week and 24% report having been drunk on two or more occasions (Inchley et al., 2016).

The proportion of adolescent boys aged 15 years who had used cannabis in the last 30 days is higher in EU countries (9%) than those in the SEEHN (6%) and CIS (4%) (Inchley et al., 2016). Cannabis use ranges from 4% (Armenia and the former Yugoslav Republic of Macedonia) to 29% (France, Estonia, and Switzerland). Heavy or regular adolescent cannabis users manifest a range of cognitive deficits, including impairments in attention, learning and memory, and an inability to switch ideas or responses. These deficits are similar in adults, but are more likely to persist in adolescents (WHO, 2016b).

# **Unhealthy diets**

Poor quality of diet is a major cause of mortality and disability worldwide. International food programmes traditionally have focused on food security and micronutrient deficiency, but the diet-related health burdens due to NCDs are now surpassing those from undernutrition in nearly every region of the world (Imamura, 2015).

Dietary risks accounted for 2.3 million deaths in Europe in 2016, of which 49.6% occurred among men. These risks contributed most to DALYs associated with five causes: ischaemic heart disease, cerebrovascular diseases, neoplasms, diabetes mellitus and hypertensive heart disease. Eastern Europe had the highest rates of DALYs associated with dietary risks (World Bank, 2017a). As the leading risk factor in central Asia, dietary risks accounted for 17.2% of total DALYs for men; they ranked second in the other subregions of Europe.

Among harmful dietary factors, diets low in whole grains, nuts, fruits and vegetables, diets high in sodium and diets low in seafood omega-3 fatty acids were responsible for 57.8 million DALYs (World Bank, 2017a).

Dietary risk is greatest in men aged 50 and older, but DALYs caused by dietary factors are apparent at an earlier age in the countries of central Asia, and eastern and central Europe (World Bank, 2017a).

There was a distinct gap between western Europe's and other countries' DALYs rates for the main types of dietary risk among men in 2016. One of the leading dietary risks in central Asia is a high level of sodium consumption, while the leading risk in western European countries is diets low in fruits, nuts and vegetables.

The proportion of cardiovascular deaths attributable to high sodium intake is particularly high for premature deaths, as shown in Fig. 1.18. Men tend to consume more salt than women, and the share of premature CVD deaths is higher in males than in females. In central Asia and eastern and central Europe, for example, almost every third premature death from stroke and every fifth from heart attack in males can be attributed to sodium intake of more than 2 g/day (WHO Regional Office for Europe, 2017).

# Physical inactivity

WHO recommends that adults aged 18–64 should do at least 150 minutes of moderate-intensity aerobic physical activity or at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity. Those not reaching this threshold are considered physically inactive (WHO, 2010b). The average rate of male inactivity in Europe was 22% in 2010. People who are insufficiently active

#### Fig. 1.18.



Proportion of cardiovascular deaths in countries of the WHO European Region among 20–69-year-olds, both sexes, attributed to sodium consumption of more than 2 g per day, 2010

have a 20-30% increased risk of death compared to people who are sufficiently active (WHO, 2017d).

Fig. 1.19 shows that the proportion of males meeting WHO recommendations for physical activity ranges from 13.6% in Latvia to 91.1% in Kyrgyzstan. Higher numbers in the eastern part of the Region probably can be explained by the higher proportion of rural population in these countries (around 60%). Data in Fig. 1.19 have been collated by the WHO European Office for the Prevention and Control of Noncommunicable Diseases using various data sources, including Global Health Observatory (GHO), EU health-enhancing physical activity factsheets and national sources for the years between 2010 and 2018. It should be noted that countries use a variety of tools and methodologies; these data may not therefore be directly comparable and should be interpreted with caution.

## **Excess body weight**

The prevalence of overweight and obesity in the Region has been increasing steadily. In 2010, WHO estimated that 62.5% of the adult male population was overweight (BMI  $\ge$  25 kg/m<sup>2</sup>) and prevalence is increasing, especially in the CIS, SEEHN and countries that joined the EU after May 2004 (WHO, 2017e). Similarly, the prevalence of male obesity (BMI  $\ge$  30 kg/m<sup>2</sup>) is also increasing. Estimates from 2014 indicate that 20.9% of the male population in the Region was obese. Differences between countries were more pronounced for obesity (range 13.6–

#### 100 90 80 70 60 Percentage 50 40 30 20 10 Ukraine Jzbekistan Iceland Georgia Tajikistan Denmark Austria Andorra Spain Portugal Romania Belgium Greece Poland Belarus Republic of Moldova ithuania Bulgaria Slovenia France Serbia Czechia Turkey Sweden Malta Cyprus Finland **3**osnia and Herzegovina azakhstan witzerland United Kingdom Vetherlands Estonia /rgyzstan Azerbaijan Armenia uxembourg Germany **Russian Federation** \*The former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO). Source: data collated by the WHO European Office for the Prevention and Control of Noncommunicable Diseases.

#### Fig. 1.19.

Proportion of men in countries of the WHO European Region meeting WHO recommended level of physical activity, latest available data

29.5%) than for overweight (44.9–66.9%), but the projected increase of obesity to 2025 is twice as high as that of overweight (WHO Regional Office for Europe, 2017).

Overweight prevalence in men in 2016 ranged from 40.9% in Tajikistan to 76.2% in Malta (Fig. 1.20). The data suggest that eastern Europe has lower levels of both obesity and inactivity.

The primary causes of overweight and obesity can be traced to energy-related behaviours – physical activity, sedentary behaviour, eating behaviour and sleep – all of which contribute to an energy imbalance between calorie intake and energy expenditure.

Up to one in three boys aged 6–9 years is now obese (Wijnhoven et al., 2014). Prevalence is generally higher in southern European countries (Ahrens et al., 2014; Inchley et al., 2016). While levels of obesity among adolescents have stabilized in some countries and regions, prevalence has increased in over half of those involved in HBSC surveys since 2002. The most marked increases have been observed in central-eastern European countries, where levels of obesity were relatively low in 2002 (Inchley et al., 2017). The strongest increases have been registered in the former Yugoslav Republic of Macedonia, Estonia, Slovakia, Poland and Estonia. Although older adolescents (15-year-olds) are less likely to be obese compared to early adolescents (11-year-olds), most young people will not




outgrow the obesity condition; about four in every five adolescents who become obese will continue to have weight problems as adults (Freedman et al., 2005).

### **Raised BP**

The leading risk factor for morbidity and mortality in European Region countries among men of all ages is raised systolic BP, with the exception of men aged 15–49 in western Europe. Mean systolic BP is decreasing over time, but men have a significantly higher level of BP compared to women in the Region (Fig. 1.21) (WHO Regional Office for Europe, 2017).

Prevalence of raised BP in males in the Region was estimated to be 29.1% in 2015. Men from several countries in central and eastern Europe have the highest mean systolic BPs in the world (Zhou et al., 2017).

Evidence from recent WHO STEPS surveys in 10 countries indicates that between 22% and 79% of people with raised BP (systolic BP => 140 mmHg and/or diastolic BP => 90 mmHg) are currently not on hypertension medication to control it (WHO Regional Office for Europe, 2017).

### **Raised blood sugar**

Obesity increases the risk of having raised blood sugar and developing diabetes. Diabetes is a well-recognized cause of premature death and disability,

increasing the risk of CVD, kidney failure, blindness and lower-limb amputation. Global prevalence of diabetes in 2014 was estimated to be 9% (WHO, 2014a). An estimated 33 million men in the European Region aged 18 years and over are living with diabetes, with the proportion of men with diabetes ranging from 5.2% to 13.3% among countries. Risk of type 2 diabetes mellitus can be reduced for high-risk individuals through moderate weight loss and moderate daily physical activity (WHO Regional Office for Europe, 2017).



## Well-being

Source: WHO (2017f); data collated by the WHO European Office for the Prevention and Control of

Well-being is at the heart of the WHO

European policy framework, Health 2020, but challenges in monitoring wellbeing remain. The development of well-being indicators is still in progress (WHO Regional Office for Europe, 2015a).

The European health report 2015 (WHO Regional Office for Europe, 2015a) notes that well-being is experienced at the subjective, individual level, but can also be described through population-level indicators such as education, income and housing. Life satisfaction and self-reported health are two of the indicators that reflect well-being at the subjective level.

A review of self-assessed health in 17 European countries found that while levels varied widely between countries, men consistently had better self-reported health than women (Dahlin & Härkönen, 2013).

This is also the situation for boys. Data from the 2014 HBSC survey showed that boys aged 13 years reported far lower rates of poor or fair health compared to girls of the same age across three measures that reflect the combined effects of age, sex, gender norms and values, and socioeconomic status: self-rated health, life satisfaction and multiple health complaints. The proportion of 13-year-old boys who rated their well-being as fair or poor ranged from 3% in the former Yugoslav Republic of Macedonia to 18% in Iceland (Fig. 1.22).

The same results can be drawn from the Programme for International Student Assessment (PISA) international survey results on 15-year-old students, with 39%





of boys reporting that they were very satisfied with their life compared to 29% of girls (Organisation for Economic Co-operation and Development (OECD), 2017a).

The different message given by health outcomes and levels of life satisfaction in boys and men can be better understood through an analysis of gender norms and roles and the intersections with other social determinants of health, which is presented in the following chapters.

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2 Links between sex, gender, masculinities and socioeconomic determinants of health Masculinities, social determinants and the life-course

Boys and adolescents: differences from the start

Adult men: exposure to risk

Ageing and quality of life

Impact of intersections between masculinities and forms of exclusion and discrimination

## 2 Links between sex, gender, masculinities and socioeconomic determinants of health

This chapter looks at how boys' and men's life expectancy, healthy life expectancy, morbidity and exposure to risk factors highlighted in Chapter 1 are influenced by the intersections between gender and socioeconomic, cultural and environmental determinants.

It introduces the concept of masculinities applied to public health and presents the evidence supporting its relevance. It pays special attention to life-course transitions and to what is known about critical events through transition periods in life that lead to increased risk of mid-life mortality and gender inequalities.

The chapter looks at how gender norms and concepts of masculinities may increase exposure to risk factors, vulnerability and stigma among boys and men with migrant or ethnic minority status, boys and men with different sexual orientation and/or gender identity (lesbian, gay, bisexual, trans, intersex (LGBTI)) and men living in specific contexts, such as being homeless or incarcerated.

## Masculinities, social determinants and the life-course

Many factors influence inequalities in men's health across the life-course, including societal factors (levels of national wealth and income inequality, gender equality, cultural adherence to traditional gender norms) and individual factors ((relative) access to economic resources, sexual orientation, and having an ethnic minority or migrant status). Despite significant progress in linking issues such as socioeconomic deprivation and gender equality with health, persistent stereotypes on men's roles in society and inequalities based on gender, education or income continue to exert a negative influence on men and women's health outcomes.

Gender, the complex of social relations and practices attached to biological sex, is one of the most important sociocultural factors influencing health and healthrelated behaviour (Courtenay, 2002). To understand how this intersects with other social determinants of health, it is useful to view gender as a system of social organization, a set of historically and culturally constructed attributes that are preserved through the activities of daily life. These activities are themselves determined by the conditions in which people are born, grow, live, work and age (Commission on Social Determinants of Health, 2008). It follows from this that masculinity consists of a "set of attributes, values, functions, and behaviors that are assumed to be essential to men in a specific culture" (de Keizer et al., in press). This element of specificity, however, leads to a range of masculinities that may have common elements associated with the dominant forms of masculinity, but which include very different forms of being a man – for example, as determined by ethnic group, class, migrant status, sexual orientation, work or education (Connell, 1998; Figueroa-Perea, 2003). This intersection of influences contributes, in turn, to different health pathways experienced by men in these situations. It also helps to explain why the pathways differ from those for women living in similar social conditions and why the size of gender gaps varies between countries in Europe and between social groups in the same country.

The sexual division of labour is central to the dominant form of masculinity and permeates the lives of both men and women. Where it remains, or becomes, increasingly rigid in the face of social change, however, it can increase exposure to risk. As a result, a large body of health research indicates that traditional stereotypes of masculinities are related to worse health outcomes in men (Evans et al., 2011; Williams, 2015). These poorer outcomes develop across the life-course and their effects accumulate as men and women age (Courtenay, 2002; Power et al., 2005).

This is evident from the gender gap in numbers of deaths, which persists across all life-stages until age 69 when, largely as a result of premature male mortality, women form by far the majority of the population and, consequently, account for more deaths (Fig. 2.1). It should be noted, however, that male death rates continue to be greater than those for females at ages 70 and over.

In terms of life expectancy, Fig. 2.2 shows that men live shorter lives than women in each of the countries shown, and the gap between those with the lowest and highest education is greater for men than women. The influence of education is explored later in relation to the so-called breadwinner model.

Two simple examples provide evidence of non-biologically determined factors – road-traffic deaths and suicides. For both, the ratio of male-to-female rates increases with age until mid-life, then reduces from age 50. Road-traffic accidents reflect the types of dangerous activities in which males engage at different points in the life-course and the social factors that determine the scale of their exposure to risk. Suicides reflect men's responses to life stress at different stages and the effectiveness of their interaction with the health sector, which is further explored in Chapter 3. There are more deaths among men at

Fig. 2.1.



Source: WHO (2017g).

#### Fig. 2.2.

Life expectancy by level of educational attainment, 2015



<sup>a</sup> The former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO). Source: Eurostat (2018a).

ages 70 and over compared to ages 60–69 – 16% more road-traffic deaths and 25% more suicides. The population at risk, however, is 12% smaller. As a result, death rates are slightly over 30% and 40% higher at ages 70 and over than at ages 60–69, respectively (Fig. 2.3 and 2.4).

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#### WHO European Region, 2016 20 5 18 16 14 Death rate per 100 000 12 Rate ratio 10 8 6 Δ 2 0 С 5-14 15-29 30-49 50-59 70+ Under 60-69 Age group Male Female Rate ratio

#### Fig. 2.4. Estimated death rates from suicide by age and sex, WHO European Region, 2016 50 6 45 5 40 35 Death rate per 100 000 Л 30 Rate ratio 25 3 20 2 15 10 5 0 0 5-14 15–29 30-49 50-59 60-69 70+ Age group Male Rate ratio Female

Fig. 2.3.

Estimated death rates caused by road-related injuries by age and sex,

Health studies tend to explain differences in men's health based on their individual behaviours. In recent years, these behavioural explanations have been framed within a wider range of factors that determine health (Commission on Social Determinants of Health, 2008; White et al., 2011). A focus on how gender relates to equity has progressively brought masculinity into the debate on the social determinants of health, exploring how factors related to obtaining social support and employment conditions, among others, have affected the development of stress, attitudes to risk-taking and, consequently, men's health behaviours and their engagement with health services and health promotion campaigns (Robertson, 2007). Using the frameworks of social determinants and gender inequalities in health also allows the processes of men's health to be addressed without overlooking those of women.

Forming a solid body of knowledge on gendered social dynamics relating to ill health also requires that a life-cycle approach be adopted. Analysing men's health/disease/care process from a life-cycle perspective makes it possible to identify different risks and problems timeously, address them, find opportunities for identifying health assets (Hernán et al., 2010) for disease prevention and health promotion, and be in a position to articulate a comprehensive health policy (WHO Regional Office for Europe, 2015c).

This approach facilitates a deeper vision of the cumulative effect of experiences throughout life, helping understanding of gender effects in health along the stages of the life cycle (Evans et al., 2011), including the dynamics in which gender identities are negotiated (Connell, 2012). It also acknowledges how health status at a certain age reflects not only current conditions, but also previous life circumstances (Kawachi et al., 2002). The temporary nature of exposure variables and their interrelationships (Ben-Shlomo & Kuh, 2002) can therefore be considered together with the biographies of disadvantage (Graham, 2002).

#### Boys and adolescents: differences from the start

Biological differences affect the chances of boys and girls surviving the first years of life, over and above social and health-care issues. Fig. 2.5 shows that despite overall improvements in mortality of children aged under 5 years, the gap between boys and girls has remained constant at around two per 1000, leading to an increase in the relative difference as the absolute numbers decrease. Most of these deaths (around 80%) occur in infancy, suggesting that while improvements are being made prenatally and during the first year of life (predominantly social and medical in origin) that affect sexes equally, the biological differences that make male babies more vulnerable persist.



Source: WHO Regional Office for Europe (2018d).

Biology alone, however, cannot explain the morbidity and mortality rates beyond early years presented in Chapter 1.

## National wealth and family affluence

Children's and adolescents' health is influenced by several social factors, including the wealth of their families and the countries in which they live. There is a well-established relationship between national income, measured in terms of gross domestic product (GDP) per capita, and average life expectancy (Preston, 1975). Life expectancy in the European Region increases dramatically at low levels of average income but is unrelated to income for above approximately \$US 25 000 per capita. Fig. 2.6 suggests a further feature of this relationship: below this



<sup>a</sup> Data from 2014. <sup>b</sup> The former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO). Source: WHO Regional Office for Europe (2018e).

threshold value, the gender gap in life expectancy increases as income per capita decreases – that is to say, the poorest countries have the largest gender gaps in life expectancy.

Studies also show that in countries with lower income inequality, boys tend to have lower mortality rates, fewer psychological and physical symptoms, higher self-reported health, lower BMI, lower prevalence of bullying and higher involvement in physical activity (Torsheim et al., 2006; Dorling et al., 2007; Viner et al., 2012; Elgar et al., 2015).

Recent evidence suggests that although adolescent health and well-being in general have improved since the early 2000s (Kuntsche & Ravens-Sieberer, 2015), socioeconomic inequalities have increased across the Region in many domains of child and adolescent health, including physical activity, overweight, psychological health and smoking (de Looze et al., 2013; Elgar et al., 2015).

The HBSC survey looks at associations between family affluence and health behaviours, showing an overall positive relation but with differences in the strength of the association across countries. The frequency of multiple health complaints among boys is associated with affluence in only about a third of the HBSC countries. Boys from lower-affluence families in western Europe tend to watch more television and drink more soft drinks, while boys of higher affluence in some eastern European countries tend to engage more in these behaviours (Inchley et al., 2016). Injuries tend to be more common among boys of highaffluence families, which might reflect better access to health services and more participation in organized sports among these boys in some countries (de Looze et al., 2012; Inchley et al., 2016).

## The impact of education: boys' socialization

The health and social benefits associated with higher levels of educational attainment are well recognized and documented (Huisman et al., 2005; Ross et al., 2012; WHO Regional Office for Europe, 2015d; Sasson, 2016), showing higher levels of male mortality associated with lower levels of educational attainment (Mackenbach et al., 2017) (see also Fig. 2.2).

Participation rates in education have increased significantly in the EU, with 96% of children of primary-school age being enrolled in primary school between 2011 and 2016 (United Nations Children's Fund, 2017). As average numbers of years of participation in education increase, those with lower levels are becoming fewer in numbers and, with limited skills, are being left behind. This is reflected in the increase in relative inequalities in most countries in Europe (Mackenbach et al., 2017).

Although availability of education has improved for most, inequalities in coverage and access for some groups of boys, such as Roma and those with disabilities, persist in the EU. These groups face general challenges in accessing all services – health, education, social services, and early childhood education and care (European Commission, 2014).

Despite greater school attendance, many boys are not achieving the same level of educational success as their female peers (Fortin et al., 2015; White et al., 2018). An increasing number of boys across many European countries leave education early and do not undertake other forms of training (Fig. 2.7). The sex ratio varies across countries, with girls being more likely to do this in countries with more traditional gender norms and roles, such as Kyrgyzstan, Tajikistan and Turkey.

Many studies have attempted to investigate the causes of the difficulties boys are facing in education, but an analysis of these is beyond the scope of this report.



<sup>a</sup>The former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO). Source: World Bank (2017b, 2017c).

One of the issues often highlighted, however, is the tendency for preschool and primary education to be female-dominated professions. In every country, few primary teachers are men – fewer than 20% of all teachers are men in all but seven countries – and in most, the percentage of male teachers in secondary education is between 20% and 40%. Only tertiary education is closer to being gender

balanced, with more male teachers in many countries, reflecting differences across educational levels in terms of status and income (Fig. 2.8). Although this may perpetuate feminine roles of care with future impacts on boys' and girls' behaviours and career pathways, some researchers highlight that gender socialization is no longer solely about being in the company of adults of the same gender, but is also about the way these adults reinforce girls' and boys' behaviour and verbal expression (Sundstrom et al., 2009).

## New challenges: social media, gaming, screen time

There are growing concerns about the impact of Internet usage by adolescent boys, who are more likely than girls to engage in online gaming over extended



periods of time. Excessive use leads to a sedentary lifestyle, reduced physical activity and poorer mental health and sleep (Herman, 2015; Maras et al., 2015; Gunnell et al., 2016).

Boys are more likely to be the victims and perpetrators of bullying and physical violence at school and, in some countries, are more likely to report being the victims of cyberbullying, with their self-esteem and body image affected by media messaging and online content (Inchley et al., 2016). Increasing exposure

to online pornography can distort boys' perceptions of normal relationships, with links to body dissatisfaction (including body fat and height), eating disorders, increased possibility of using anabolic steroids, lower quality of life, sexual preoccupancy, uncertainty and dissatisfaction, sexual objectification of women, recreational and permissive sex attitudes, and sexually aggressive behaviour (Koletić, 2017).

## Adult men: exposure to risk

## Gender and differential perceptions of health risks

Men's risk-taking behaviours and underuse of health services (see Chapter 3) are linked to norms associated with masculinities and vary according to social and cultural contexts, but also appear consistent across many countries (Baker & Shand, 2017).

Men across socioeconomic groups demonstrate higher risk behaviour in their smoking habits than women, tending to start smoking earlier, to smoke a greater number of cigarettes per day, to inhale more deeply and to smoke cigarettes without filter tips and that are high in tar and nicotine (Department of Health and Children, 2008).

In general, men, notably young men, have worse dietary patterns than women (Imamura et al., 2015); men, for example, consume a greater volume of sugary drinks (Briggs et al., 2017) and tend to lack control over their diet, as the purchase and preparation of food has traditionally been seen as women's responsibility (WHO, 2004). Their nutritional awareness tends to be more limited than women's and men are less likely to be familiar with food labels (Miklavec et al., 2016).

A study of men in the Russian Federation suggested that heavy drinking of strong spirits "elevates or maintains a man's status in working-class social groups by facilitating access to power associated with the hegemonic ideal of the real working man" (cited in Baker & Shand, 2017). Research has also shown that in most societies, males are less abstemious, tend to be greater so-called big drinkers and cause more problems as a result of these intensive consumption patterns, factors that are considered a measure of masculinity (de Visser & Smith, 2007; Dempster, 2011).

Recent literature goes beyond binary gender approaches, however, focusing more on the diversity of masculinities associated with consumption styles (Mullen et al., 2007). Young girls' increasing consumption of substances is introducing changes in social interactions (Lyons & Willott, 2008; Romo-Avilés et al., 2016) and relationships that have begun to challenge notions of masculinity and femininity (Månsson, 2014). Practices are therefore emerging in which some young people interpret these changes as the perpetuation of values, norms and beliefs around a particular gender identity, while others consider them as a basis for transgression. This is the case of girls being described as adopting so-called masculinized patterns of consumption, but also of boys who show changing views regarding issues such as drunkenness and who generally refuse to define their masculinity around risk-taking (Marcos-Marcos et al., 2013).

### Changing nature of employment: from breadwinner to dual earner

Health risks related to gendered dynamics in adult populations are strongly fragmented between the productive and reproductive areas. For men, the workplace is a central space that transmits the hegemonic meaning of masculinity. Indeed, the position of men as the main breadwinner in the family is at the heart of the dominant construction of masculinity (Carrigan et al., 1985). Breadwinner refers to the person whose contribution accounts for all or most of the household budget. It includes the idea that the work should bring enough income to support the rest of the family members.

Clear progress has been made in ensuring equal access to paid work, but significant gaps remain in areas such as hiring, remuneration and access to professional development opportunities. The current productive system still reproduces the patterns of male power: decision-making, planning and competitiveness are considered masculine characteristics of labour dynamics (Thébaud, 2010). Interestingly, European Social Survey findings among men and women are showing a decline in viewing men as "breadwinners" and women as "homemakers".

Despite reproducing patterns of male power, the breadwinner model is not necessarily good for men's health. A systematic review carried out by Slebus et al. (2007) on prognostic factors of the ability of people with chronic diseases to work reveals studies that describe how being a male breadwinner can be a factor for myocardial infarction and chronic back pain. A study in Copenhagen, Denmark (Andersen et al., 2003) reveals that gender differences dissipate in more egalitarian societies, with men and women sharing practically the same prognostic factor in the same income stratum.

Research has suggested that the role of breadwinner and longer working hours result in higher levels of hypertension and increased smoking in males (Artazcoz et al., 2009). An association has also been found between greater lack of sleep and less physical activity during leisure time. One study found that men felt compelled to earn money and return to work after a heart attack (Sahan et al., 2016). Unemployment has decreased slightly more for men, while women have not yet reached the same levels of participation in the labour market. Despite a 3% increase in jobs in the EU between 2008 and 2017, those occupied by men with a low level of education fell by 1% while those occupied by women from all education backgrounds increased by 4%. Fig. 2.9 shows the size of these changes by sector. The predominant reductions were in construction and manufacturing, with most jobs being lost by men. Conversely, the largest increase was in human health and social work activities, with almost four out five of these new jobs being filled by women. This may also explain the increase of young men in the NEET group shown in Fig 2.7.



2

Unemployment carries serious health risks for men (Strandh et al., 2013; Gulliford et al., 2014). Long-term unemployment, in particular, has been linked to depression and the use of alcohol and other drugs (Lappalainen et al., 2017). Unemployment has also been associated with excess weight gain and increased risk of heart diseases (Lundin et al., 2014; Monsivais et al., 2015). The economic recession coincided with significant increases in the rate of suicide in men (Karanikolos et al., 2013; Antonakakis & Collins, 2014; O'Donnell & Richardson, 2018).

An increase in the dual-earner model (Pfau-Effinger, 2004) is associated with these changing patterns of work. Although the participation of women in productive work has improved substantially in most countries, significant differences exist across the Region. Nordic countries have the smallest inequality gap in productive working hours between men and women (less than 10%), while southern countries – Greece, Italy and Spain – show the greatest inequality gap (40%) (Warren, 2007). Studies have revealed that this transition has had varying effects on men's health. Generally, the incorporation of female partners into paid work has positive effects, providing women do not earn more and do relinquish their role in reproductive work, housework and other caring activities (Artazcoz et al., 2004).

Gender job segregation also means that some of the health loss for men is related to accidents and exposure to risks within the workplace. Fig 2.10 shows the higher incidence rate of work-related injury among men. Exposure to inappropriate physical working conditions (ergonomic stress, work-related injuries, toxic substances and nocturnal working hours) contributes to the loss of disease-free years at older ages (Platts et al., 2016). Sedentary jobs can increase the risk of obesity, diabetes and CVD (Uludağ et al., 2015). Technological advances in the workplace tend to improve physical conditions but cause stress because of the demand for associated new learning (Karttunen et al., 2016).

Other health problems connected with insecure and/or stressful work conditions or environments can arise. These are strongly related to occupational status, principally through imbalances between work demand and control over working conditions, and between effort and rewards (Marmot, 2004; Siegrist & Wahrendorf, 2016).

General improvements in life expectancy and the health status of older workers have contributed to increases in the activity rate of older workers. In the EU alone, two thirds of men aged 55–64 remain active in the labour market. Increases in the statutory retirement age mostly raise employment rates among high-income and healthy older workers (Staubli & Zweimueller, 2013), with less clear effects for other categories of workers, who are more likely to be in ill health or have a limiting disability by age 65.



## Ageing and quality of life

## The impact of retirement on health

Evidence of the impact of retirement on health for the population as a whole is mixed. The heightened role employment plays in men's sense of purpose is one of the pathways through which retirement may affect the health of older men. Indeed, some studies have found an association between retirement, increased anxiety and psychological distress through lower feelings of self-worth, particularly in situations of early or involuntary retirement (Wang, 2007; Calvo et al., 2013).

The impact of retirement on men's physical and mental health has also been linked to changes in lifestyle: for example, the risk factors for cardiovascular conditions, one of the leading causes of early mortality among older men, can directly be affected by retirement – smoking, stress, alcohol consumption and lack of physical activity, for instance (Phillips, 2006; Bloemen et al., 2016). Post-retirement health can be mediated by several factors, which in turn reflect the gendered advantages and disadvantages accumulated during the course of life (Hallerod et al., 2013). Chief among these factors are social networks and income. Men are less used to transitioning in and out of paid work due to caring responsibilities (see Chapter 4) and have less diversified social networks and roles while in retirement (engaging in caring, or religious and social activities, for instance) (Williams, 2003; Goll et al., 2015; Schwartz & Litwin, 2018). Men's individual capacity to endorse different roles after retirement has been found to be an important factor in explaining differences in well-being among retired men (Ryser & Wernli, 2017). Formal social participation, such as volunteering, appears to have a greater health promoting effect for older men than informal social participation, such as contacts with relatives (Ang, 2018).

#### Living arrangements in later life

As the population of the Region ages, average household size and prevalence of multigenerational households have decreased markedly. Older Europeans are increasingly more likely to live alone or with a spouse, while living with children or other relatives has become less common (Tomassini et al., 2004; United Nations Department of Economic and Social Affairs, Population Division (UNDESA), 2005, 2017a). Fig 2.11 shows that older men in both urban and rural settings are more likely to reside with a spouse or partner, rather than live alone. Older men are also more likely to reside with a partner or spouse than their female counterparts. The trend towards independent forms of living arrangements among older people is closely related to, and sensitive to changes in, the health, marital and socioeconomic status of the older population (Gaymu et al., 2006; Sarma et al., 2009). Living arrangements also influence well-being and life satisfaction in old age (Gaymu & Springer, 2010).

Despite these general trends, there is vast diversity across European countries, although regional patterns are apparent (Fokkema & Liefbroer, 2008). Lower household sizes and a higher prevalence of independent living arrangements among older men are the hallmark of northern and western European countries, while larger households and co-residing with children are considerably more common in southern and eastern European countries. It is in the countries of central Asia, however, that older men are most likely to live in multigenerational households. Their prevalence varies widely, from 19% in Uzbekistan and 18% in Albania, to under 6% in other European countries (UNDESA, 2017b).

There are numerous associations between living arrangements in older age and disability, morbidity and mortality, with a decisive disadvantage for older people living alone that is more pronounced for men. Even after adjusting for other risk factors and health behaviours, living alone has been associated with increased

#### Fig. 2.11.



mortality in men (Kandler et al., 2007; Pimouguet et al., 2015), although there are also pro-health effects, such as not needing to rely on others, that deserve attention. Men are also exposed to higher nutritional risks as they are likely to have poorer dietary habits (Charlton, 1999; Kharicha, 2007). The moderating effect on mental health issues of relationships with adult children puts older men living without a partner at a particular disadvantage, as they are less likely to co-reside or to maintain frequent and high-quality contacts with their adult children. Older men who live alone are more susceptible to depressive symptoms if the frequency of contacts with children is low (Tosi & Grundy, 2018). When residing alone, however, men are more likely to be institutionalized than women (Pimouguet et al., 2015).

Some regional patterns of association between the level of urbanization and living arrangements in older age are apparent. In most central Asian countries, older men living in urban areas are significantly more likely to live alone than those in rural areas. In the rest of the Region, older men are more likely to live with their children in rural communities, although this pattern is reversed in some of the Baltic (Latvia, Lithuania) and eastern European (Belarus, Ukraine) countries.

Financial resources consistently contribute to an increased likelihood of independent living in older age (Mathieson et al., 2002; Tomassini et al., 2004;

Gaymu et al., 2006; Palloni, 2011). Low incomes and (lack of) home ownership have been identified as the strongest predictors of institutionalization and transition from living with a partner to living alone (Martikainen et al., 2008). A recent study exploring the impact of transition to a single-person household on the everyday life of older people showed that men could live as before on their own financial resources to a greater extent, while women needed the help of children, grandchildren and the welfare system (Emilsson & Stahl, 2016).

#### The risk of loneliness

As indicated above, older men are less likely than their female counterparts to live alone, but those who do so may be at higher risk of experiencing loneliness and lack of social contacts. Empirical findings regarding the feeling of loneliness show huge variations within and between countries, and between sexes, with a higher share of women reporting feeling lonely (Fig 2.12). While most older people do not feel lonely, the proportion of men aged 85 years or older experiencing loneliness ranges from less than 2% in Germany to almost 28% in Ukraine. Interestingly, data show that rates of loneliness are lower in more individualistic Nordic societies rather than in Mediterranean countries, with their more traditional familyoriented cultures (see also Dykstra (2009) and Sundstrom et al. (2009)).

The subjective perception of loneliness by older men is often associated with widowhood, which is the most decisive factor for men to experience loneliness. Widowhood has significant negative effects on physical and mental health, as



well as on quality of life (Hawkley et al., 2010; Luo et al., 2012; Davidson & Rossall, 2015). Becoming a widower is also associated with higher risk of anxiety and mood disorders (Onrust & Cuijpers, 2006), and increased mortality (Skulason et al., 2012). Compared with widowers who are in a new relationship, men who stay single 4–5 years after the loss of their wife have a higher risk of experiencing difficulties falling asleep, reporting a less meaningful life and experiencing other manifestations of psychological morbidity (Hauksdóttir et al., 2013). Widowhood also results in higher levels of depressive symptoms, which are positively correlated with the quality of the marital relationship before the death of the partner (Schaan, 2013).

The feeling of loneliness is distinct from the concept of social isolation as an objective, quantifiable lack of social relations. Living alone is not automatically related to perceived loneliness, as there is a difference between becoming alone and the deliberate choice to live alone. Older men are likely to underreport loneliness due to lower relational expectations. This results in more fragile relationships within their community and to higher risk of becoming isolated as a consequence of major life events, such as divorce, widowhood or retirement (Beach & Bamford, 2014). Older men have on average significantly less contact with their children, family and friends (Brandt et al., 2009), a lower propensity to use social and health-care services (Redondo-Sendino, 2006) and a low degree of engagement in community activities (Beach & Bamford, 2014). All this puts older men, particularly those in poor health and with low incomes, at high risk of social isolation (Beach & Bamford 2014).

## Older men as carers

Unpaid work and care for dependent people has long been a main differentiating factor in terms of gender, with care being associated with feminine values and often deemed by society as occupying a subordinate role vis-à-vis paid work (Folbre & Nelson, 2000). Studies reporting on caring roles of younger cohorts generally conclude that men are less likely to provide filial care, particularly when it involves tasks that deviate from traditional normative roles for men (such as home maintenance), involve cross-sex personal care, or when spouses are available (Arber & Ginn, 1991; Campbell & Martin-Matthews, 2003). Further analysis of men's engagement in care is presented in Chapter 4.

The situation is markedly different among older couples. As shown in Fig 2.13, at a stage in life in which men are no longer working, the proportion providing informal care not only increases, but even surpasses that of women in higher age groups (Dahlberg et al., 2007), as informal care provided by men is concentrated on care for their older spouses and within the household (Bracke et al., 2008). Higher prevalence of carers among men in older age groups is very much linked to



Fig. 2.13.

Household-standardized prevalence rates of informal care to older people, by age (60+) and sex, latest available data<sup>a</sup>

the differences in living arrangements among older people discussed above. Once living arrangements are accounted for, the differences between sexes diminish or disappear altogether (Bono et al., 2008; Rodrigues et al., 2012).

The number of men caring for their older spouse has increased due to demographic trends towards an ageing population (Hirst, 2002). Consistent evidence that informal care provided to co-residing spouses is associated with increased risk of adverse health outcomes (Schulz et al., 2001) suggests that male older carers, like their female counterparts, are particularly vulnerable to experiencing declining health as a result of informal caregiving.

## Impact of intersections between masculinities and forms of exclusion and discrimination

Higher levels of intolerance to men who are migrants, from minority ethnic populations, LGBTI or offenders, leading to exclusion and discrimination, tend to be found in areas where normative models of hegemonic masculinity prevail (European Parliament, 2007; Human Rights Watch, 2018). Such discrimination can have a serious impact on the health of the men affected, either through mental torment or physical risk, even to death (United Nations Human Rights Council, 2011).

Many of the most challenging health issues facing men in the European Region, including high levels of premature death and morbidity due to noncommunicable and communicable disease, are compounded by social exclusion and discrimination. To achieve annual decreases of over 10% in notification rates for TB, for instance, further efforts are required to address the most vulnerable and hard-to-reach groups, such as migrants and prison inmates, of whom men contribute the largest number (European Centre for Disease Prevention and Control & WHO Regional Office for Europe, 2018).

## The health impact of gender norms and discrimination among sexual minorities

Sexual minorities in European countries report substantially worse physical and mental health than their same-gendered heterosexual counterparts (Sandfort et al., 2006; Elliot et al., 2014; Public Health Agency of Sweden, 2014; Higgins et al., 2016). The root causes behind the health inequalities LGBTI people experience relate to cultural and social norms around gender that give preference to and prioritize heterosexuality, causing minority stress, victimization, discrimination and stigma (European Commission, 2017).

It is a fundamental human right of an individual to live their life without discrimination based on their sexual orientation (European Court of Human Rights, 1950; United Nations, 2009). Despite these legal protections, many LGBTI people experience extreme prejudice, with physical, mental and socioeconomic sanctions as a result of their sexuality (European Parliament, 2007; United Nations Human Rights Council, 2011; Carroll, 2014; Konstantinov et al., 2016; Human Rights Watch, 2018).

Direct exposure to sexuality-based discrimination has been shown to be inversely linked to self-rated health and subjective well-being among same-sex couples in Europe (van der Star & Bränström, 2015). A recent study on the relationship between country-level stigma and life satisfaction among LGBTI people in the 28 EU Member States shows clearly the health impact of discrimination across countries (Pachankis & Bränström, 2018) (Fig. 2.14).

The United Nations and others have documented widespread physical and psychological violence against LGBTI people in Europe, including murder, assault, kidnapping, rape and sexual violence. LGBTI people face violence and discrimination when seeking refuge from persecution and in humanitarian emergencies. They may also experience discrimination and abuse in medical settings, including unethical and harmful so-called therapies to change sexual orientation, forced or coercive sterilization, forced genital and anal examinations, and unnecessary surgery and treatment on intersex children without their





Relationship between country-level stigma and life satisfaction among LGBTI population, 28 EU countries

Source: adapted from Pachankis & Bränström (2018), with permission.

consent (United Nations, 2015a). A 2012 survey conducted by the European Union Agency for Fundamental Rights (2013) among over 93 000 LGBTI people in Europe found that a considerable proportion experienced discrimination in health-care settings on the basis of their LGBTI status. More recent reports show a growing awareness among health professionals about the lack of rights experienced by LGBTI persons (European Union Agency for Fundamental Rights, 2016).

There are strong links between countries' acceptance of LGBTI people and their gender equality legislation, with those with the most robust legislation being the most welcoming communities (Henry & Wetherell, 2017). Homophobia within state-run institutions such as the military and prisons can lead to discriminatory treatment of gay and trans men (Carroll & Quinn, 2009; Human Rights Watch, 2018). Sexual minorities in conflict zones are also more likely to be victims of physical and sexual abuse (Moore & Barner, 2017).

Discrimination starts early for boys who do not conform to traditionally expected forms of masculinity, and adolescent boys who are not heterosexual report worse health outcomes than do their heterosexual peers (Saewyc, 2011). By far the most commonly studied health disparities have been those related to mental health, especially suicidal ideation and suicide attempts. Within a wide range of population-based studies, a higher proportion of young people from sexual minorities indicate emotional distress, depression, self-harm, suicidal ideation and suicide attempts than do their heterosexual peers (Saewyc, 2011). Boys from sexual minorities are also more likely to use substances (Marshal et al., 2008), engage in sexual-risk behaviour, report overweight and underweight, and be victims of violence (Saewyc, 2011).

## Having an ethnic minority or migrant status

An unprecedented rise in refugee and asylum seekers on the move across Europe has been seen in recent years (WHO Regional Office for Europe, 2016c). In contrast to refugees, who tend to comprise greater numbers of women, asylum seekers are most often younger males, mostly fleeing persecution in their home countries.

Recent data from Sweden concluded that the risk of suicide among unaccompanied refugee minors and young adults in 2017 was nine times higher than the equivalent figure for the same age group in the Swedish population. All cases of self-harm and suicide documented within the time period of this research were among migrant boys and young men (Hagström et al., 2018).

Human trafficking affects many boys and men (International Organization for Migration, 2018). It is estimated that over 10 million men and boys globally are affected by exploitation and modern slavery, which includes forced sex work and forced begging (Zimmerman & Kiss, 2017). Trafficking has seen a marked increase since the significant rise in refugees and migrants from 2014 onwards (United Nations Office on Drugs and Crime, 2016).

Adolescent boys form most unaccompanied refugee and migrant children (Fig. 2.15) and are recognized as being particularly vulnerable to exploitation and abuse (United Nations High Commissioner for Refugees, 2012; Freccero et al., 2017). The United Nations Committee on the Rights of the Child (2012) reports that unaccompanied or separated children face risks such as family separation, detention, sexual and genderbased violence, smuggling and trafficking, security risks, exploitation, and other forms of physical and psychological abuse. Europol estimates that 10 000 migrant and refugee children have gone missing after arriving Europe in recent years. Many of them are feared to be exploited and abused for sexual or labour purposes.



ource: Eurostat (2018d).

#### Homelessness

Social exclusion comes in its most extreme form through homelessness, which increases the risk of serious health problems and premature death (Wilkinson & Marmot 2003; Burki, 2013). Barriers to social inclusion, or the marginalization of particular groups in society, have been identified as a key route into homelessness (Eurostat, 2010).

It is hard to determine the extent of homelessness across the European Region, but numbers are on the rise in all countries. Only Finland reports a decline in those without stable housing (Abbé Pierre Foundation & European Federation of National Organisations Working with the Homeless, 2018), with homeless men being much more likely to be living rough on the streets.

An important gendered difference in the route to homelessness is that men often retreat from what they perceive as intolerable or complex family problems, while women flee abuse to seek safety (Bowpitt et al., 2011). Men are more likely to experience multiple-exclusion homelessness, which compounds the impact of homelessness with other domains of deep social exclusion, such as having been in prison or mental health hospital, or taking part in begging, street drinking, survival shoplifting or sex work (Fitzpatrick et al., 2012). Substance abuse is strongly linked to homelessness, but it is difficult to ascertain whether this is a cause or an effect (McVicar et al., 2015; Wershler & Ronis, 2015).

Ex-servicemen are at risk of homelessness due to maladjustment back into civilian life; those who have seen active service may struggle with post-traumatic stress disorder (Ramchand et al., 2015; Heath et al., 2017; Cooper et al., 2018).

Lack of permanent housing can make treatment for long-term conditions, such as TB and HIV, and delivery of drug treatment programmes difficult, raising risks to people's health and to the development of multi-resistant strains of diseases (Marmot Review Team, 2010; European Centre for Disease Prevention and Control & WHO Regional Office for Europe, 2018).

#### Men in prison

Most of the prison population across Europe consists of males who come from sections of society with high levels of poor health and social exclusion (WHO Regional Office for Europe, 2007; Enggist et al., 2014) (Fig. 2.16). The health of the prison population has been recognized as a key public health priority by the Regional Office (WHO Regional Office for Europe, 2013b; Enggist et al., 2014). Prisoners tend to have higher levels of multidrug-resistant TB, HIV and hepatitis C than the general population (Altice et al., 2016; Dolan et al., 2017; European Centre for Disease Prevention and Control & WHO Regional Office for Europe,

2018). This is partly a result of the incarceration of vulnerable populations from the most disadvantaged groups in society, including injecting drug users, homeless people and those with mental health difficulties. The effects of these are enhanced through limited policies to manage associated risks.

Men who have sex with men within the prison population also have a higher risk of STIs and HIV (Dolan et al., 2016; Sánchez Recio et al., 2016), with reticence to disclose their sexual activity with the prison authorities, either through fear or shame (Krienert et al., 2014).



A significant proportion of prisoners have pre-existing mental health problems and find themselves in prison instead of receiving appropriate treatment (Fazel & Seewald, 2012; Samele et al., 2017). The incidence of self-harm and suicides has long been noted as being high in prisons, with many factors associated with the risk (Fazel et al., 2017). Prisoners released after their sentence are also more likely to end up further socially excluded due to family breakdown, loss of previous employment, difficulties in gaining new employment and housing, and the effect imprisonment has had on their mental health and self-esteem (Fazel & Seewald, 2012). 3 A people-centred health systems' response to men's health and well-being Health needs and patterns of health-seeking behaviour

Health-service responses to men with known risks: the missing men

Using masculinities to understand health-seeking behaviours

Accounting for men's and boys' attitudes and circumstances: the case for health promotion

# 3 A people-centred health systems' response to men's health and well-being

Evidence on differences in life expectancy and burden of disease between men and between men and women presented in Chapters 1 and 2 raises questions about how health services and systems in the European Region are addressing the gender-specific health needs of men through the life-course. Efforts towards strengthening people-centred health systems in the Region (WHO Regional Office for Europe, 2015e) are at the core of this chapter.

The consultation process behind the WHO European strategy for men's health urged that efforts be made to increase understanding of how men's health needs, health-seeking behaviour, and health services' and systems' responses are influenced by gender norms and other determinants of health. Gender-responsive, people-centred health services and systems address links between biology, gender and social determinants during the life-course (WHO Regional Office for Europe, 2015c). A life-course approach for health and well-being builds on the interaction of promotive, protective and risk factors throughout people's lives (WHO Regional Office for Europe, 2015e).

The consultation process also highlighted the need to design models of care that render health services more accessible to boys and men and which address the impact of masculinities across the life-course. This should include health services actively reaching out to men at high risk of vulnerabilities, while acknowledging their diversities. Growing evidence shows that when a gender approach is applied, men will change the way they respond to their own needs and health (European Institute for Gender Equality, 2011; Promundo, 2018).

A gender analysis is beyond the reach of this report. However, taking men's perspectives and challenging gender stereotypes that damage the health of both men and women, this chapter presents evidence on health-seeking behaviour patterns, health services' responses and the role of health promotion in improving men's health.

### Health needs and patterns of health-seeking behaviour

Evidence from Chapter 1 shows how men's health in the Region is largely affected by NCDs, injuries and mental problems. Despite men being at greater risk for all leading causes of death and being more likely to adopt unhealthy behaviours than women, they are less likely to perceive themselves at risk for health problems and report better subjective health consistently (Courtenay, 1998, 2000, 2003; Oliffe et al., 2010).

As was the case with the analysis of evidence for the WHO women's health report (WHO Regional Office for Europe, 2016d), it is difficult to identify indicators and data presenting a regional overview of men's health needs and patterns of health-seeking behaviours disaggregated by sex. Lack of routinely collected sex-disaggregated data on health needs, health-seeking behaviour and use of services is an important challenge to planning and designing services, and for organizing providers. To this purpose, data are gathered through ad-hoc surveys and self-reported variables. This chapter focuses mostly on men's access to primary care services. Evidence on referral to specialized care is contradictory (Blank, 2015), sometimes supporting the idea that men can access specialized care services more quickly (Blabanaova, 2002).

Men's and women's needs across the life-course inform the planning and design of services, organization of providers and management of health facilities, and are at the core of the European Framework for Action on Integrated Health Services Delivery (Fig. 3.1) (WHO Regional Office for Europe, 2016e).



Source: WHO Regional Office for Europe (2016e).

The Framework also recognizes the need to address determinants, empower populations and engage patients upstream to put people at the centre.

From this perspective, how men's health needs are identified, how they perceive symptoms of disease, and how gender norms and other socioeconomic determinants affect men's health-seeking behaviours enable an understanding of the barriers that need to be overcome and strategies that need to be put in place to ensure more adequate health-care seeking behaviour by men. This includes exploring gender differences in seeking to address how men engage in care-planning, self-care, self-management of chronic conditions and decision-making regarding their own health. Services can then be designed appropriately, and the health system can enable other conditions for providing person-centred, integrated health service delivery that responds to men's and women's needs.

Data from 32 European countries (Fig. 3.2) show that men over 16 years consistently report less unmet health-care needs than women (Eurostat, 2018e). Unmet health-care needs are reported when people require further care because their health status has not improved, or care was inadequate. Only Denmark, Serbia and Slovakia reported higher unmet needs for men than for women. The most common reasons for men and women not to meet their health needs were that care was "too expensive" or that they "wanted to wait and see", which was indicated more often by men.



<sup>&</sup>lt;sup>a</sup> The former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO). Source: Eurostat (2018f).

There are no clear reasons behind men reporting unmet health-care needs less often than women, but men have fewer contacts with health services and therefore cannot identify if their needs are properly met. Health-care users are more aware of the limitations and shortcomings of the health-care system and can better identify needs that have not properly been met.

Health-care seeking behaviour is determined by differences in the perception and interpretation of symptoms and in the perception of needs and willingness to seek help. Lack of knowledge about symptoms, treatment and services prevents men from seeking help unless the symptoms cause them substantial pain or immobility. Men prefer to wait and, if concerned, are less sure about which services would be most suitable for the symptoms (Yousaf et al., 2015).

Level of education is inversely associated with consultations. Fig. 3.3. shows that men with lower education are more likely to consult a health professional (self-reported data). In 23 of 30 countries, men with the highest level of education are less likely to consult a health professional than women with lower education.

Fig. 3.4. shows the consultations and unmet needs by level of education for men and women. Data from Eurostat show that for all countries, 36% of men and 48% of women had consulted a medical professional during the four weeks prior to the survey (Eurostat, 2017). Women were more likely than men to have consulted a



<sup>a</sup>Level 0-2 = less than primary, primary and lower-secondary education. <sup>b</sup>Level 3-4 = upper-secondary and post-secondary non-tertiary education. <sup>c</sup>Level 5-8 = tertiary education. Source: Eurostat (2017).

#### Fig. 3.4.

Consultations and unmet needs by educational level, men and women, latest available data<sup>a</sup>



<sup>a</sup>Education levels: level ED0-2 = less than primary, primary and lower-secondary education; level ED3-4 = upper-secondary and post-secondary non-tertiary education; level ED5-8 = tertiary education. Source: Eurostat (2017, 2018g).

health professional in all countries, with the highest differences seen in Croatia, Turkey, Latvia, Italy and Lithuania. Women with lower levels of education were most likely to consult a health professional, compared to women with higher levels of education and men from any level. The lowest gender differences were seen for the highest level of education, with men from this group being less likely to consult a health professional than any other group of men or women.

Self-reported consultations by age groups show that in all countries (except Cyprus), males over 15 years are less likely to consult general practitioners (primary care) than women (Eurostat, 2018e). The peak difference occurs between 15 and 44 years and can be explained by women's higher needs during the reproductive age (Hawkes, 2013).

Data mostly refer to self-assessment and self-reported behaviours. Only a few studies adjust gender differences by morbidity level. A study from Spain reported that women have a significantly higher burden of morbidity than men at all ages and visit primary care more often. When adjusted by age and morbidity burden, however, no statistical differences were found; for high levels of morbidity burden, men's attendance was significantly higher (Carretero, 2014). A population study in the United Kingdom found that patterns of consultation prior to diagnosis of three non-sex-specific cancers differed little between men and women. This finding could challenge the assumption that men delay seeking care for serious illness and are being diagnosed at a later stage of disease,

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leading to poorer prognosis, higher mortality and reduced life expectancy (Wang et al., 2014).

Studies on utilization of primary care by men in countries of central Asia show that adult men account for fewer than 25% of all visits in urban areas and 12–18% in rural areas (Cashin, 2002).

Results from household survey data in Armenia, Bosnia and Herzegovina, Croatia, Poland, the Republic of Moldova and Serbia (International Men and Gender Equality Survey (IMAGES)) gathered in IMAGES reports (Promundo, 2018) show that men present different health-care seeking behaviour than women. In Armenia and the Republic of Moldova, the proportion of men having accessed all services (outpatient or inpatient) three months prior to the survey was lower than women (men 9.9–15.8%, women 36.2–52.7%). In Armenia, 13.7% of men and 4.5% of women never accessed health services. Men presenting symptoms in Poland were less willing or able to access health services than women.

Although research looking at the correlation between utilization of health services and morbidity is limited, it has been suggested that lower rates of visits to primary care by men cannot be explained by better health (Zielinski et al., 2008).

## Health-service responses to men with known risks: the missing men

Evidence in Chapters 1 and 2 highlighted the relevance of focusing on NCDs when looking at men's health outcomes. Health-system barriers to NCD prevention and treatment have been documented during the last decade in several countries in the Region (WHO Regional Office for Europe, 2018f) and provided the basis for a renewed commitment to accelerate health-systems transformation for better NCD outcomes. The need to use a gender approach in this transformation is clearly reflected in an extract of the outcome statement from the conference on health systems' responses to NCDs held in Sitges, Spain, in April 2018 (WHO Regional Office for Europe, 2018g):

We will integrate an equity-based approach across the health system response to NCDs to address the impact of gender norms and roles and the social determinants of health on the differential exposure to risk factors between men and women, on their health-seeking behaviours and on the responses from health-care providers. We will aim to implement gender-specific interventions and other specific approaches to address the disproportionate morbidity among women and disproportionately high mortality among men, building on the growing knowledge provided by gender-based medicine and research. We will seek to eliminate gender stereotypes in health promotion, disease prevention and management interventions that may perpetuate harmful
aspects of masculinities and femininities, particularly among adolescent boys and girls. We will work towards demonstrating leadership in health systems to promote gender equity in the health sector workforce, and tackling the gender imbalance in unpaid care.

Understanding health-systems barriers to NCD management requires that both prevention and treatment should be examined as important elements for reducing morbidity and mortality (Fig. 3.5).

A gender analysis of the health-service response to men's health or to NCDs alone is beyond the scope of this report, but better understanding of men's healthseeking behaviour and system responses can be created through examining specific issues, such as the use of services in connection to CVD or detection and control of raised BP.



\*Bots & Grobbee (1996). \*Unal et al. (2005). \*Bajekal et al. (2012). \*Bennett et al. (2006). \*Wijeysundera et al. (2010). <sup>1</sup>Ford et al. (2007). \*Hunink et al. (1997). \*Goldman et al. (1984). 'Hotchkiss et al. (2014). 'Capewell et al. (1999). \*Jackson et al. (1990). 'Capewell et al. (2000). "Laatikainen et al. (2005). \*Vartiainen et al. (2000). \*Björck et al. (2009). \*Aspelund et al. (2010). \*Bandosz et al. (2012). 'Bruthans et al. (2012). \*Psota et al. (2018). 'Palmieri et al. (2010). \*Flores-Mateo et al. (2011). \*Unal et al. (2013). Source: Chestnov et al. (2016). Chapter 1 highlighted the contribution of raised BP to the high NCD disease burden and showed how men from some countries in central and eastern Europe have the highest mean systolic BPs in the world. While this seems to have decreased in women in central and eastern Europe, and more recently in central Asia, there has been little or no change in men.

Evidence from the recent WHO STEPwise approach to Surveillance (STEPS) surveys conducted in several of these countries indicates that the detection, treatment and control of hypertension are suboptimal. Among men with raised BP, defined as the systolic BP greater or equal to 140 mmHg or diastolic BP greater or equal to 90 mmHg or currently receiving antihypertensive treatment, only 22–66% could recall that the high BP was ever diagnosed by a health-care worker (Fig. 3.6). According to the same source, only between 8% and 35% of men with raised BP receive antihypertensive treatment. To achieve optimal reductions in CVD mortality and morbidity, raised BP should not only be treated, but also be controlled at levels below 140 mmHg systolic and 90 mmHg diastolic. Control rates are very low, however, ranging between 2% and 19%. Men are missing from services, even after being diagnosed and starting treatment, and much remains to be done to improve detection, treatment and control of hypertension in the Region, especially in its eastern part.



Source: calculations from WHO European Office for the Prevention and Control of Noncommunicable Diseases, using national STEPS surveys conducted between 2012 and 2017.

Research studies from the Russian Federation have found that men are more likely than women to respond to higher drug prices by reducing demand. Studies also show that CVDs are often associated with higher drug expenditure; high prescription prices may explain the underutilization of primary care by adult men (Sari & Langenbrunner, 2001; Blank et al., 2015).

Consistent with this finding, Fig. 3.7 shows that countries with high out-ofpocket (OOP) expenditure also have high premature mortality from CVD. As inhospital treatment is free of charge in many settings, OOP expenditure is mostly driven by medication costs. Outpatient medication is particularly important in preventing CVD complications, and most of the medications should be taken life-long. People in settings with significant OOP expenditure might therefore be reluctant to buy the necessary medicines, even if they are prescribed by health professionals. It seems that one of the keys in reducing CVD mortality and ensuring universal health coverage is to reduce OOP expenditure.

The association between OOP expenditure and premature deaths from cancer seems less strong, and treatments for cancers are mostly delivered in in-hospital settings and are frequently free of charge for patients.

Making primary care more flexible and oriented towards men's preferences may reduce gender inequalities by engaging men in self-care and, potentially, in



Fig. 3.7.

the care of others. The provision of outreach services targeted at men and menfriendly invitations to attend for health checks have been proposed to reduce the gap (Wilkins et al., 2008). The availability of after-hours services during evenings and weekends may increase access to health care for many working men (Courtenay, 2003).

Strategies aimed at increasing men's uptake of services should be implemented. For example, primary care in eastern Europe and central Asia has protocols for providing proactive home visits and preventive services for children and women. Health professionals are accountable for outcomes for pregnant women, infants and children: they should also be accountable for men's health outcomes (Galdas et al., 2015).

Overall, health professionals' competence in understanding gendered health-care seeking patterns is weak. Primary care professionals should be trained in how to communicate with men to encourage appropriate healthy choices and behaviours (Galdas et al., 2005). Most family planning services, for example, are not designed to welcome men, and health professionals lack competencies in counselling men on contraceptive methods (Levtov et al., 2015).

Services may reinforce sex differences and stereotypes. Where boys tend to express clinical problems by means of externalizing behaviour, girls tend to internalize problems. These sex differences are consistently reported, but it is important to avoid sex-stereotyping health problems, as this may prevent boys experiencing emotional problems from seeking care and may influence professionals' sensitivity to diagnosing emotional problems in boys (Rutter et al., 2006; Zahn-Waxler et al., 2008; Pine & Fox, 2015; Wesselhoeft et al., 2015).

## Using masculinities to understand health-seeking behaviours

Chapter 2 presented the concepts of masculinities, gender and social determinants, and the evidence related to these can help understanding of health-behaviour patterns in men. A recent report on suicide in Ireland (O'Donnell & Richardson, 2018), for example, highlights that dominant norms of masculinities are often represented by middle-class, middle-age, heterosexual men; it is therefore important to understand how these norms may further marginalize gay men, transgender men, men from lower socioeconomic backgrounds and ethnic minority men.

Analysis of coping mechanisms show that men (more than women) tend to cope with their problems and dilemmas by taking refuge in addictions or ignoring needs for treatment. Consequently, depression symptoms in men often remain undiagnosed (Emslie & Hunt, 2009). Among other health implications, failure to recognize mental health problems contributes to suicide rates being significantly higher in men (Oliffe et al., 2012). Besides the fact that men avoid asking for help or deny their state of discomfort (as doing so would be considered a symptom of weakness and vulnerability), other aspects relating to disorders such as depression also come into play. Diagnostic criteria are often polarized around signs of a traditionally feminine disease; these include the expression of sadness (rather than anger), emotional numbness, substance abuse or impoverished interpersonal relationships, which are often more common symptoms in men's depression (Oliffe & Phillips, 2008). Men report that they would seek help less often when faced with a serious emotional problem and believe that they would be more embarrassed than women if friends knew about professional help received for their mental health (Möller-Leimkühler, 2002; Have et al., 2010).

Masculinities norms change over time, across groups of men and across ages. Adolescent boys' and young men's beliefs around gender and masculinity play a significant role in their health-seeking and sexual behaviour. Research among men and boys shows consistently that gender-inequitable norms influence men's health-seeking behaviour, including HIV/STI prevention and contraceptive use (WHO, 2014d). Data from IMAGES show that although young and adult men report low levels of testing compared to women, men with higher levels of education and more equitable gender norms are more likely to seek HIV/STI testing (Kato-Wallace et al., 2016)

Men's lesser involvement in the reproductive health sphere of family life is also influenced by the fact that they access primary care health services less frequently than women, are less involved in preventive initiatives and health promotion, and are less health-literate (Noone & Stephens, 2008; Robertson et al., 2008). This helps to explain differences in the way women and men prioritize their health (Robertson, 2007; Emslie & Hunt, 2008).

The perception of maleness may hinder men from seeking services around sexual health, as they feel they should be highly knowledgeable about sex (Pearson, 2003). Unmet supportive care needs are highly prevalent after localized prostate cancer diagnosis, with older age, lower levels of education and higher likelihood of depression barriers to seeking help (Hyde et al., 2017).

A United Kingdom study explored men's propensity to delay seeking help for infertility despite their desire for children. It found that men appeared willing to accept responsibility for their infertility but perceived it as having the potential to fracture current and future relationships. Regardless of how well men measured up to other hegemonic ideas, ultimately they can do little to counteract the threat of other (fertile) men (Dolan et al., 2017).

## Accounting for men's and boys' attitudes and circumstances: the case for health promotion

Gender-transformative health promotion aims to improve health outcomes across the life-course by redefining harmful gender norms, challenging gender stereotypes and developing more equitable gender roles and relationships. Health promotion initiatives that fail to take gender perspectives into account are usually less effective and may sometimes perpetuate gender stereotypes in a way that is counterproductive to achieving sustainable health outcomes and gender equality. Effective interventions may focus on making help-seeking more normal, especially among boys and men, for whom help-seeking behaviour goes against traditional masculinity norms (Spratt et al., 2010).

The Men's Health Forum gives an example of a response to stereotypical men's health promotion (Bogle, 2013):

The findings of a study of eighty-two men aged forty years and over in two deprived boroughs in North West England partially support the idea that men should be targeted using an understanding of hegemonic masculinity but that they should also challenge notions that men should be targeted exclusively in this manner. The qualitative study aimed to explore men's understandings of their health within a social context. Many participants did not welcome being stereotyped by advertising and rated existing health promotion material poorly. They disliked stereotypical portrayals of the masculine body as young and athletic, as they did images depicting men as beer drinkers and made suggestions for the future advertising of health promotion interventions. The point was made that it is not necessarily the norm for men to frequent what are considered to be typical male spaces, 'A lot of men don't go to pubs, a lot of men don't go to clubs, a lot of men don't go to sports fixtures and stuff like that. More men go around supermarkets' ... . The authors concluded that a range of health promotion strategies should be used and in diverse locations.

Evidence suggests that types of healthy behaviour favoured by men differ from those of women. A German study found that men are more likely to favour competitive and exercise-oriented activities, and they associate healthy ageing with mobility and physical activity. Women, on the other hand, display a broader understanding of healthy ageing, which includes physical activity as only one aspect alongside healthy diet, relaxation/wellness, memory training and independent living; they prefer holistic and socially-oriented services that are not performance-oriented (Patzelt et al., 2016).

Health promotion initiatives that are underpinned by hegemonic masculinity ideals have limited success (Robertson & Williamson, 2005). The literature offers compelling evidence that well-designed programmes for men and boys can lead to positive changes in their behaviours and attitudes related to sexual and

reproductive health, maternal, newborn and child health, interactions with their children, use of violence against women, questioning of violence with other men and health-seeking behaviour (Barker et al., 2010).

The European Commission report *Access to healthcare and long-term care: equal for women and men*? (2010) presents evidence from EU countries that sex-differentiated prevention programmes and health education initiatives mainly target women. Men across Europe face stereotypical attitudes that obstruct their access to prevention programmes that should target both sexes.

Males have been found to be attracted to programmes that do not require extensive time commitment but present, for example, key nutrition messages in a thoughtful and comedic manner (Taylor et al., 2013). In relation to support in navigating unhealthy food environments, research indicates that men potentially are more susceptible to offers and promotions and will base their choices on foods perceived to be more satiating. Men are less responsive than women to foods promoted or labelled as healthier options and are less familiar with labelling schemes (Miklavec et al., 2016).

Studies showing the different influence of socioeconomic determinants on smoking and cessation rates among men and women recommend translating this evidence into cessation interventions (Movsisyan et al., 2016).

Evidence shows that promoting positive models of manhood, such as caring and involved fatherhood, while concurrently addressing structural barriers can improve men's help- and health-seeking behaviour (cited in Baker & Shand (2017)). Quit smoking campaigns targeting young men that promote "quitting as a strong masculine choice and something a good father would do" (VicHealth, 2017) provide good examples of this approach.

Age also needs to be taken into consideration. Stigma around mental health problems, especially for boys, is already present in children of primary-school age. The reactions of peers, parents, teachers and health-care providers to disclosure of problems may serve to delay or prevent help-seeking; health promotion should therefore not only aim at children and adolescents, but also at the people who care for and work with them.

A systematic review looking at awareness and knowledge of STIs among adolescents in the European Region<sup>7</sup> found that gender appears to have a strong

<sup>&</sup>lt;sup>7</sup> The review included studies in Croatia, Finland, Georgia, Germany, Ireland, Italy, the Russian Federation, Sweden, Ukraine and United Kingdom (England).

influence, especially for human papillomavirus. Significant gender differences were observed, with females having better awareness and knowledge than males. Although the data are limited, as not all studies reported results separately for males and females, these findings could be reflective of the way awareness campaigns on, for example, human papillomavirus have been targeted more at females than males (Samkange-Zeeb et al., 2011).

A Swedish study shows that boys felt counselling did not encourage them to use condoms or other contraceptives. This may indicate that guidance counselling is based on stereotypical approaches to sexuality, and that boys are not involved, but experience a sense of alienation or encounter a lack of understanding (Public Health Agency of Sweden, 2017).

Retirement constitutes an opportunity for increasing civic engagement. Overall, it has been found that workers from higher-status occupations volunteer more after retirement than those with lower-status occupations. Similarly, based on the life-course perspective and the educational diversity hypothesis, research carried out by van den Bogaard et al. (2014) points out that while education level seems to boost volunteering directly, it does not appear to moderate retirement effects.

All kinds of social involvement, such as employment, educational courses, voluntary or charity work, providing help to relatives or neighbours, and participating in sports or other social clubs, increases cognitive function in men and women. From a public health point of view, research underscores the role of civic engagement for older-aged men's health and well-being (Engelhardt et al., 2010), with social benefits, such as experiencing companionship and having the feeling of making an important contribution to society (Goth & Smaland, 2014); but while there is widespread agreement on the importance of community activity for supporting inclusion and well-being, organizations find it difficult to engage older men in generic non-gender-specific social activities (Milligan et al., 2015).

Attitudes to sexual behaviour determine expectations on use of condoms, and men and women with a lesser desire or need for emotional intimacy are more likely eventually to impose their view on the negotiation processes (Tschann et al., 2002). This means that the analysis of risks, such as STIs, should take into account (among other factors) the type of emotional relationship boys have with their sexual partners.

Research has also looked at links between ethnicity, masculinities, sexuality and health. A study from the United Kingdom, for example, shows that homogeneous descriptions of black and minority ethnic communities rarely capture the cultural distinctions within different Asian or African– Caribbean populations: men from

African–Caribbean populations, for instance, have highlighted the difficulties of conflicting pressures over maintaining traditional male roles within their families and communities and being in undervalued jobs (Kierans et al., 2007)

Men receive more informal care than women, as men's wives are a strong source of support and informal care (Emslie & Hunt, 2009; Olai et al., 2015). Some studies show that men feel less comfortable participating in self-management support if it is viewed as incongruous with valued aspects of their identity (Galdas et al., 2015). Research into specific health issues reveals that men with rheumatoid arthritis, for example, find information-giving sessions, rather than a discussion group, to be more acceptable in providing support to enhance self-management (Flurey et al., 2017). Men find self-management support more attractive when activities are perceived to challenge masculine ideals associated with independence, stoicism and control, when it is perceived as action-oriented, has a clear purpose and offers personally meaningful information and practical strategies that can be integrated into daily life (Galdas et al., 2015).

Information about the Men's Shed, a grassroots organization that advocates for men's health and well-being while contributing to their local community, is shown in Box 3.1.

## Box 3.1.

## The Men's Shed

This initiative addresses the stereotype that men are not supposed to talk about their emotions or care about their health, which endorses unhealthy and harmful behaviours. Its motto, "Men don't talk face to face, they talk shoulder to shoulder", refers to the active engagement of participants in activities that contribute to the growth of the person and the community. The activities are ultimately tools to promote skill-building, and physical and mental health under the guidance of their core values of leadership, equality and openness (Irish Men's Shed Association, 2016). Men's Sheds are self-governed and are open to people of all ages and backgrounds. The first was founded in Australia in 1998 and the first in Europe in Ireland in 2011. Since then, the Men's Sheds movement has become global, with Men's Sheds opening across Canada, Spain and the United Kingdom (European Men's Shed, 2014). A series of projects has been launched through this network to raise awareness and promote health and well-being among men. One of the projects is called Spanner in the Works®; it is a website designed to encourage men to learn about health and seek regular medical check-ups. This is one of the ways in which the Men's Shed breaks down gender-based barriers to health-care access while integrating men as active and healthy members of their community.

4 Governance for men's health and for gender equality Men's health and gender equality: the need for policy coherence

Engaging men in gender equality

Mechanisms for transformative change

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# 4 Governance for men's health and for gender equality

Chapters 2 and 3 focused on how the use of a gender approach linked with other social determinants of health would promote understanding of men's health needs and appropriate responses from the system. This last chapter looks at how improving the health and well-being of men and contributing to gender equality are complementary objectives that require changes in governance for health. This is also one of the drivers of the strategy on the health and well-being of men in the WHO European Region. The consultation process for the strategy highlighted the need to have appropriate governance mechanisms promoting outcomes that are sensitive to the relations that unite men and women as social groups in particular communities. Policies and actions can build on the gains achieved by addressing gender equality gaps and the links between gender and other social determinants of health to achieve greater health equity. They should also focus on promoting and protecting men's health alongside that of women, advancing gender equality and breaking down barriers between programmes, instead of reinforcing them.

There is consensus in the literature addressing governance for health and wellbeing that shared accountability – health and non-health sectors, public and private actors, and citizens – has become a factor of primary importance for the achievement of successful governance for intersectoral action for health and well-being (Boston & Gill, 2011; Committee on Public Health Strategies to Improve Health, 2011; Greer et al., 2015). This is due to the increased participation of, interaction between, and interdependence among, actors.

The United Nations 2030 Agenda for Sustainable Development and the 17 global SDGs act as catalysts for improvement and represent crucial tools and mechanisms for increasing accountability for health and well-being among all 53 Member States of the European Region.

Policy coherence, the SDGs as a framework for accountability and specific mechanisms for transformative change deserve specific attention in this chapter.

## Men's health and gender equality: the need for policy coherence

Despite having the highest rankings in gender equality in the world, gender inequalities exist in all countries in the Region. Some progress can be seen in the last decade, but this has been a very slow process in most countries (Fig. 4.1). Experts argue that a key strategy towards closing the gender gap lies

73

Score 2006

#### Fig. 4.1.

Gender gap index for 41 Member States of the WHO European Region, 2006–2017



in challenging the very same gender stereotypes that are seen to be harmful to the health and well-being of both women and men (see Chapter 2).

Historically, gender-focused health policy initiatives and gender-mainstreaming approaches to health have, in most cases, aimed at improving women's health (Richardson & Smith, 2011; Rovito et al., 2017; Richardson & Carroll, 2017). This has been attributed, in part, to the significant impact gender inequalities have on women's health and the fact that no country in the world has so far attained gender equality (WHO Regional Office for Europe, 2016d).

Gender analysis and gender-based approaches to men's health that take into consideration the links between norms and other social determinants of heath have not been common in the past. As discussed in previous chapters, a sense of normality around differences in life expectancy and morbidity between men and women has somehow prevailed, combined with a lack of understanding of masculinities as a social construct. Some argue that the positioning of men's health versus women's health in binary terms, instead of a relational approach, has also been a contributing factor to the low uptake of gender approaches to men's health.

An international mandate for policy approaches on better engaging men and boys in achieving gender equality and health equity has been built over the years, based on the Beijing Platform for Action from 1995 and developed through the annual sessions of the United Nations Commission on the Status of Women (MenEngage, 2014). WHO produced a framework for better integration of men's issues into gender and health policy in 2010 (WHO, 2010c). National gender equality policies, however, seldom take a comprehensive approach on how to engage men in advancing gender equality and better health outcomes (European Institute for Gender Equality, 2011).<sup>8</sup>

Evidence is building on how gender equality policy and high levels of gender equality in society benefit men's health, alongside that of women and children. Living in a gender-equal country means twice the chance of reporting high well-being, half the chance of being depressed, and about 40% less risk of violent death for adult men (Holter, 2014). Higher levels of gender equality are also related to lower divorce rates and lower male suicide compared to female suicide (Holter, 2014).

Research on adolescents shows that boys, too, are better off in more genderequal societies; they have higher life satisfaction (de Looze et al., 2017), report fewer psychosomatic complaints (Torsheim et al., 2006), are more likely to use contraceptives (de Looze et al., unpublished data, 2018) and have lower mortality rates (Viner et al., 2012) compared to their peers in less gender-equal societies. These effects exist irrespective of national wealth and income inequality levels. Research explaining the link between gender equality and boys' well-being is scarce, but it has been suggested that gender equality in society fosters more socially supportive relationships in, for example, the family context through more equal involvement of fathers and mothers in childrearing (de Looze et al., 2017). In such a socially supportive context, all children – not just girls – may be safer, healthier and happier.

Policy-makers could benefit from recognizing that all policy and policy-making is gendered. While much policy-making, including health policy, is not consciously about men, policies target men in their different capacities, and often in a gender-neutral way. Following WHO's Gender Responsive Assessment Scale (Fig. 4.2), policies need to be gender-responsive to effectively respond to men's (and women's) health needs. This means fulfilling two basic criteria (WHO, 2011):

- gender norms, roles and relations are considered
- active measures are taken to reduce their harmful effects.

<sup>&</sup>lt;sup>8</sup> The European Institute for Gender Equality (2011) analysis was complemented by a WHO Regional Office for Europe desk review of current national gender equality strategies in WHO European Region, available in English and Russian.

#### Fig. 4.2.

WHO Gender Responsive Assessment Scale (adapted)

Gender-unequal	Perpetuates gender inequality by reinforcing unbalanced norms, roles and relations
<ul> <li>Privileges men over women (or vice versa)</li> <li>Often leads to one sex enjoying more rights and opportunities than the other</li> </ul>	
Gender-blind	Ignores gender norms, roles and relationships
Often reinforces gender-based discrimination     Ignores differences in opportunities and resource allocation for women and men	

- Often constructed based on the principle of being fair by treating everyone the same
- Gender-sensitive

Considers norms, roles and relations BUT:

- does not address inequality generated by unequal norms, roles or relations
- no remedial action is developed

#### Gender-specific

#### Considers women's and men's specific needs

- Considers how norms, roles and relations affect access to, and control over, resources
- Intentionally targets and benefits a specific group of men and women
- Makes it easier for women and men to fulfill duties that are ascribed to them based on their gender roles
- Gender-transformative Fosters progressive changes in power relationships between women and men

#### Posters progressive changes in power relationships between women and in

- Addresses the causes of gender-based health inequities
- Includes ways to transform harmful gender norms, roles and relations
- The objective is often to promote gender equality

Source: WHO (2011).

A review of current national health policies and strategies in the WHO European Region<sup>9</sup> to establish the extent (if any) to which gender and/or men's health issues were addressed was conducted for this report. The following general observations can be made.

• Variations in the meaning and context of the word gender: gender appeared in approximately half of the documents, with the meaning and context of its usage varying considerably between countries. The term gender differences was used frequently to describe sex differences in health behaviours and health outcomes, and the terms were used interchangeably in some instances. Gender was named in the context of the social determinants of health in a few of the strategies, and a fair number named gender equality as a core value or principle. The term gender mainstreaming appeared in four of the strategies reviewed, but none provided a definition of gender.

<sup>&</sup>lt;sup>9</sup> Documents reviewed were current national health policies and strategies in WHO European Region Member States that were available in English language in the Regional Office repository at the time of drafting this report. Thirty-five policies were reviewed, comprising a mixture of health strategies and other (social inclusion and health-care) documents.

- **Reference to sex differences:** some strategy documents identified sex differences in health behaviours (lifestyle behaviours, use of services and risk behaviours) and/or health outcomes (life expectancy, mortality and morbidity) as an overall context or backdrop to the strategies.
- **Translation into gender-responsive action:** only in a few instances were sex differences translated into strategic recommendations or expected outcomes. Two strategies referred to the need for health services with a gender focus and four promoted gender mainstreaming. The reduction of the gap in life expectancy was addressed once, by calling for a faster increase in male life expectancy.
- Limited references to men or men's health issues: the term men's health appeared once in all of the documents reviewed, referring to "norms that may keep men out of health services and promote unhealthy lifestyles". Men are also mentioned as perpetrators of domestic violence.

It has been established that policies involving men and boys in achieving gender equality and health equity will be most effective if they are integrated within a country's gender equality and health policies, rather than existing separately (WHO, 2010c). The men's health action plan of Ireland (Department of Health, 2016) provides an example of such integration (Box 4.1).

#### Box 4.1.

## National men's health policy in Ireland – lessons learned from 10 years of implementation

In 2009, Ireland emerged as the first country in the world to publish a national men's health policy (Department of Health and Children, 2008). The Department of Health commissioned an independent review of the policy in June 2014 with a view to informing the future direction of men's health policy in Ireland, aligned to the key themes of the national health strategy, *Healthy Ireland* (Department of Health, 2013). The findings (Baker, 2015a; see also Baker (2015b)) informed the development of a follow-up action plan *Healthy Ireland – men 2017–2021* (Department of Health, 2016).

The impetus for Ireland's men's health policy development was rooted in: sex differences in life expectancy and mortality; concerns about disparities in health outcomes between different populations of men; an increased awareness of the need for a more gender-specific approach to health policy; and a wider grassroots development within men's health.

An explicit focus on gender-specific strategies and strengths-based approaches has underpinned Ireland's approach to men's health policy development and implementation. Although ostensibly a health policy, it explicitly adopted a social determinants approach, highlighting the potential gains and benefits to other sectors and government departments of working in partnership to support men's health. Now in its second phase of implementation, Ireland has documented learning from this policy process (Richardson & Carroll, 2009; Richardson & Smith, 2011). The learning suggests that:

#### Box 4.1 contd

- taking a gender- and strength-based approach greatly improves the capacity of health policy to reach men, particularly so-called hard-to-reach groups of men;
- a gender-responsive action plan for men's health under the national health policy brings greater concrete progress for men than more general gender mainstreaming approaches for health; and
- accountability structures in relation to governance, leadership and implementation are crucial for cross-sectoral implementation.

The Swedish national policy for gender equality, adopted in 2016, includes involving men and boys as a key strategy for achieving the aims of the policy (Box 4.2).

#### Box 4.2.

## Swedish gender equality policy recognizes the important role of men

A new national policy for gender equality was produced by the Swedish Government in the autumn of 2016, with a strategic goal on gender-equal health being included for the first time (Government Offices of Sweden, 2016). Involving men and boys in gender equality and promoting healthier gender norms is a key strategy for reaching the aims of the policy.

The main objective of Swedish gender equality policy is that women and men should have the same power to shape society and their own lives. In working towards this objective, the Government has put forward six subgoals:

- 1. equal division of power and influence (women and men must have the same right and opportunities for active citizenship and decision-making);
- 2. economic equality (women and men must have the same conditions with regard to paid work);
- 3. equal education (women and men must have the same opportunities with regard to education, study options and personal development);
- equal distribution of unpaid housework and the provision of care (women and men must have the same responsibility for housework and have the opportunity to give and receive care on equal terms);
- 5. equal health (women and men, girls and boys must have the same conditions for good health and be offered care on equal terms); and
- 6. men's violence against women must stop (women and men, girls and boys must have the same right to, and opportunity for, physical integrity).

The Swedish policy recognizes the important role of men and boys in advancing gender equality and describes how promoting healthier and more equitable gender norms for men has been found to reduce men's violence against women and children, improve men's health, reduce the disproportionate burden of domestic responsibilities on women, and foster more equitable relationships at household, community and society levels. The policy notes that Swedish men's generally positive attitude to gender equality is

#### Box 4.2 contd

not necessarily converted into gender-equal action, so a more active policy on involving men in gender equality, with a specific focus on gender stereotypes and destructive masculinity norms, has been devised.

The policy debate has helped to define equity in a broader sense, maintaining the emphasis on power relations not only of men over women, but also of men over other men. This supports the adoption of a relational perspective when analysing ill health processes (Broom, 2009) and leads to a more holistic understanding of differences and inequalities in health.

## Engaging men in gender equality

In the 1979 Convention on the Elimination of All Forms of Discrimination against Women (United Nations, 1990), governments committed to take all appropriate measures to modify the social and cultural patterns of conduct of men and women, with a view to achieving the elimination of prejudices and customary and all other practices that are based on the idea of the inferiority or superiority of either of the sexes or on stereotyped roles for men and women (Article 5a).

Today, the 2030 Agenda for Sustainable Development and SDGs could become catalysts to better address men's health from a gender and gender equality perspective, particularly in relation to preventing ill health and death in men due to NCDs (Baker & Shand, 2017), and promoting men's well-being and life satisfaction.

The SDGs are building on the past while advancing a complex and transformative development agenda that puts gender equality at its heart, both as a standalone goal in SDG 5 and its nine targets, and as mainstreamed throughout 14 of the 17 SDGs with gender-related targets that address the social, economic, political and cultural conditions that reinforce gender inequalities (United Nations Europe and Central Asia Issue-Based Coalition on Gender, 2017).

The SDGs strengthen political accountability for health and well-being. They were adopted by all 53 Member States of the European Region in September 2015 at the United Nations Sustainable Development Summit; they therefore provide a political mandate at the highest level in every country to work towards improving health and well-being sustainably, without leaving anybody behind.

They also strengthen community accountability through promoting mechanisms to ensure participation across the whole of society, including participatory

governance, civic engagement, increased monitoring, improved accessibility to services, and the constant use of evidence and research in decision-making.

The global process of localization of the SDGs requires countries to strengthen national accountability mechanisms for health and well-being. It means they must set or align existing targets to the health-related SDG targets at national level, with a focus on improving national measurement and accountability platforms and systems to collect the necessary data and information. This requires both whole-of-government and whole-of-society approaches and a focus on quality of data – all of which need strong accountability mechanisms.

Although gender-related targets are mainstreamed through the SDGs, less work has focused on how targets in SDG 5 specifically relate to men's health and how men's role in advancing the targets through policy and practice will contribute to better health for all at all ages. This is the focus of the analysis below.

## Sharing care

## SDG 5

Target 5.4. Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate

Indicator 5.4.1. Percentage of time spent on unpaid domestic and care work, by sex, age group and location (United Nations, 2015b).

Time is a limited resource that can be used for various activities, such as paid work, unpaid care work or personal activities (World Bank, 2012), and is spent differently by men and women. While men spend more time on paid and less on unpaid work than women, combining both forms of work, men work less in every country of the European Region (World Bank, 2012) (Fig. 4.3).

Unpaid care work is defined as an individual's activity to provide what is "necessary for the health, well-being and maintenance and protection of someone or something" that involves "mental or physical effort, is costly in terms of time resources" and is not remunerated (Ferrant et al., 2014).

Fig. 4.4 shows that women spend more time on unpaid care than men in all countries. Time-use analysis across Albania, Armenia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Serbia and Turkey show that women's time spent on



#### Source: OECD (2018).

unpaid and domestic work exceeds that of men on average by 205 minutes a day (United Nations Population Fund (UNFPA) & Promundo, 2018). Nearly 57% of women in Ukraine report that their male partners spend less than five hours or none at all per week on caring for family members such as children, older family members or people with disabilities (UNFPA & Promundo, 2018).

Social norms and roles are shaping the way unpaid care work is distributed. Caring for a child is often perceived as a female role, where the men's responsibility comprises solely of disciplining or passing on skills to the children (UNFPA & Promundo, 2010). Since mothers are the ones to recover from the pregnancy and breastfeed, men tend to start their parenting as a secondary role (Fursman & Callister, 2009). Men can be perceived as being unable to fulfil the role of caregiver to the same extent as women. Men, women and even mothers-

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#### Fig. 4.4.

in-law might doubt men's ability, which can discourage men from engaging in caregiving (UNFPA & Promundo, 2018).

Fatherhood can nevertheless serve as an entry point to change the inequitable division of care work. The involvement of men in caregiving can have positive effects that include better physical and mental health outcomes for the father, partner and their children. Involved men live longer, have less physical and mental health problems, are less likely to consume alcohol and drugs, are more productive at work, have fewer accidents, are more likely to be satisfied with their lives and are more emotionally connected to their partners and children (UNFPA & Promundo, 2010; UNFPA & Promundo, 2018). The father's active involvement from early on can lead to reduced maternal stress during the pregnancy and less abusive behaviour towards the child later in life (Promundo et al., 2013). Additionally, boys who see their fathers involved in care work are more likely to participate themselves in caregiving later in life (Kato-Wallace et al., 2016).

Factors influencing the uptake of care are (lack of) policies that support gender equality at household level, economic and non-economic factors, workplace realities and norms, social roles, and gender-(inequitable) norms and attitudes to the provision of care and the division of work. Additionally, institutional parameters, such as the availability of free child care, a minimum wage, the market value of home-work services such as cleaning and the possibility of private provision of services from friends or relatives, can play a role in the uptake of care by the father (Davaki, 2016; UNFPA & Promundo, 2018).

It is important to recognize the range of fatherhood and living arrangements. Involvement of the father during birth can be influenced by health-care systems' policies and practices in choosing to which degree they support or encourage his presence (UNFPA & Promundo, 2010).

Policies and legislation can promote the idea of men as caregivers and also support equality between men and women in terms of income disparities and career opportunities (Heilman et al., 2017). Family policies are a means of changing income distribution, and contributing to equality in the labour market and provision of care. They can transform gender norms by attracting non-carers into care. Family policies consist of policies, programmes and laws targeting families using direct and indirect subsidies for parents. One form of this kind of policy is parental leave. Studies suggest that to be effective, parental leave should be universal, an individual entitlement, flexible, with a high rate of compensation, and based on collective financial mechanisms rather than employment liability. It should also be complemented by services such as child care (Davaki, 2016; UNFPA & Promundo, 2018).

The rules and conditions of parental leave vary throughout the Region. While eastern European and central Asian countries saw the largest increase in paternity-leave provision between 1994 and 2013, they still rank behind western Europe (Addati et al., 2014; UNFPA & Promundo, 2018). The EU directive calling for four months of non-transferable leave allocated to fathers, however, is only provided by a few countries (Addati et al., 2014). Fig. 4.5 shows these differences across eastern and western parts of the Region, with countries in the east not having paid leave for fathers or having parental leave without incentives. Parental leave without incentives means that fathers only have access to paid parental leave, which is leave available to either parent. Research shows that women are more likely than men to use paid parental leave.

A great share of the care and support needed by older people is provided through informal care, often from family members. Men and women aged 75 years or older constitute 10% of unpaid caregivers, but the greatest share of unpaid caregivers in the Region is formed by women of working age (WHO Regional Office for Europe, 2018h). Men account for 39% of informal caregivers among the 13 countries included in the Survey of Health, Ageing and Retirement in Europe dataset. Unpaid informal care has consequences for the health and well-being of the carer, and female caregivers report worse outcomes than men (Verbakel et al., 2017).

#### Fig. 4.5.

Parental-leave policies across Europe, latest available data



Source: World Policy Analysis Center (2018).

Parental time for children dominates the debate around policies on providing leave from work, but postponement of the retirement age and the growing proportion of people aged 65 and older (14% in 2010, rising to 25% in 2050) pushes towards the introduction of targeted time-off schemes to care for older people, or to an update of existing schemes (Bettio & Verashchagina, 2012; WHO Regional Office for Europe, 2018i). Long-term care needs are more unpredictable and variable over time than those for parental leave. Studies suggest that current leave schemes need to be better coordinated with other provisions in place and should encourage participation by men. Having the possibility of flexible working arrangements could be a more effective response for many people (Bettio & Verashchagina, 2012).

Generally, men are not as involved in caregiving due to social norms and gender roles, but studies show that many men report wanting to spend more time with their children (UNFPA & Promundo, 2018). It is important to engage boys and young men in caregiving from early on to change these norms (Promundo et al., 2013; Kato-Wallace et al., 2016). A range of initiatives shows how parents, teachers and health educators can support the deconstruction of the idea that men are incapable of, or uninterested in, caregiving (UNFPA & Promundo, 2010). 83

Long-term caring and fatherhood represent natural entry points for involving men in care work, which can lead to a more gender-balanced public image of typical carers (Bettio & Verashchagina, 2012). Engaging men in occupations in health and other services, such as day-care centres or schools, may help to change the perception of men as caregivers and fathers (Swedish Association of Local Authorities and Regions, 2016).

## Prevention of gender-based violence

## SDG 5

Target 5.2. Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.

## Indicators

5.2.1. Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age.

5.2.2, Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence (United Nations, 2015b).

WHO estimates that one in four women in the Region will experience violence based on gender at some point in their lives (WHO et al., 2013). Fig. 4.6 shows the overall prevalence of intimate-partner violence and non-partner sexual violence in the Region (WHO et al., 2013).

Interpersonal violence is strongly gendered. Men are disproportionately represented among victims of violent deaths, and when women are killed, it is often their partner who is responsible (WHO, 2014e). WHO and others estimated that as many as 38% of female homicides globally in 2013 were committed by male partners, while the corresponding figure for men was 6% (WHO et al., 2013). Globally, men's reports of using intimate-partner violence are similar to reports from women reporting victimization (between 25% and 40% among men, and between 27% and 41% among women) (Barker et al., 2011).

Boys use violence against other boys (and girls) at an early age to create community and hierarchy in, for example, school settings (Fig. 4.7). The same kind of violence, connected to masculinities, status and community between men, can be seen in, for example, hooliganism (Swedish Ministry of Health and Social Affairs, 2014).

Boys are more likely to be victims and perpetrators of bullying and physical violence at school and, in some countries, are more likely to report being the

WHO estimates of prevalence of violence against women, 2013



Source: WHO et al. (2013).

victims of cyberbullying, with their self-esteem and body image affected by media messaging and online content (Inchley et al., 2016).

From public health, health equity and gender equality perspectives, it is necessary to question the tolerance of violence. There is an increased risk of men being violent against women in societies where violence between men is considered normal (Swedish Ministry of Health and Social Affairs, 2014). Fig. 4.8 shows that men are the main victims of interpersonal violence, usually perpetrated by men.

Violence between men should be as unacceptable as men's violence against women. Several studies suggest that underreporting of sexual violence by male victims is more pronounced than for females, so male victims remain a rarity for aftercare service providers (McLean, 2013). This may be due to embarrassment and fear of the stigma that may result. There is also a problem of men facing services that are not equipped adequately to recognize or manage male sexual abuse and

#### Fig. 4.7.

Fifteen-year-old boys involved in a physical fight at least three times in the last 12 months



HBSC teams provided disaggregated data for Belgium and the United Kingdom; these data appear in the map above. Source: Inchley et al. (2016).

#### Fig. 4.8.



<sup>a</sup>The former Yugoslav Republic of Macedonia (MKD is an abbreviation of the ISO). Source: WHO (2016a).

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violence (Kapur & Muddell, 2016).

Efforts to prevent violence against women should be made relevant for men, as it is still often regarded as a women's problem. Risk factors include experiencing child maltreatment, low level of education, the acceptance of violence and harmful use of alcohol and drugs (WHO, 2010d). Having weak community sanctions and poverty at community level, and traditional gender norms and social norms supportive of violence at societal level, are increasing the likelihood of violence against women (WHO, 2010e). According to an international study, owning firearms, being involved in robbery or fights, or being imprisoned are also associated with men's use of intimate-partner violence (Barker et al., 2011).

Among the interventions identified by a United Nations multicountry study on men and violence were: challenging social norms influencing the acceptability of violence and subordination of women; addressing child abuse and promoting healthy families; working with young boys to address early ages of sexual violence perpetration; promoting healthy sexuality for men; addressing male sexual entitlement; and ending impunity for men who rape (Fulu et al., 2013).

At relationship and individual levels, evidence-based interventions include a focus on reducing child maltreatment (WHO, 2010e) and supporting the parenting skills of men and women (UN Women, 2015). Supportive and nonviolent parenting has been shown to be effective in reducing male aggression, risktaking and risks in general related to peer violence (Kato-Wallace et al., 2016).

School-based interventions focusing on dating and relationships can challenge stereotypes and gender norms before they become deeply embedded and prevent violence against women (WHO, 2010e). Addressing gender norms within comprehensive sexuality education and supporting young people in developing skills, knowledge and values so they can be responsible in making decisions about their sexual health and relationships is also important (UNFPA, 2013).

Gender-based violence can be used in conflict situations as a "weapon of war to destabilize populations, disrupt social cohesion and transform the ethnic and social composition of warring groups" (Ricardo & Verani, 2010). While women and girls are more affected, young men also become victims of sexual violence, leading to health-related problems (Ricardo & Verani, 2010; Kato-Wallace et al., 2016). Gender norms linking masculinities with militarization may reinforce violence and underpin shifts in gender norms to empower women after the conflict. Awareness that programmes need to be multisectoral and based on a transformative approach is growing (Ricardo & Verani, 2010).

Men's violence against women and men are interrelated, but most of the interventions are developed and conducted separately. This leads to less effective results than addressing them simultaneously. Preventing and reducing violence requires that the reasons for violence and the influence of gender norms, including norms and social constructions of masculinity, be addressed (Fleming et al., 2015). By not addressing social norms, initiatives run the risk of treating the symptoms and not the underlying inequalities (UNFPA, 2013).

## Sexual and reproductive health

## SDG 5

Target 5.6. Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences.

## Indicators

5.6.1. Proportion of women aged 15–49 who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care.

5.6.2. Number of countries with laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education (United Nations, 2015b).

When it comes to sexual and reproductive health, women have traditionally been seen to bear most of the responsibility. One illustrative example is that the largest cross-country data set for contraceptive prevalence, World Contraceptive Use, hosted by UNDESA, includes family planning indicators for women of reproductive age only.

It is important to highlight that women's sexual and reproductive rights and choices are a core component in advancing gender equality and women's health, and are therefore reflected in SDG 5 through a specific target (5.6), with two indicators. It is also essential, however, to reflect that sexual and reproductive health is equally important for men, and that sharing responsibilities for healthy sexuality is important for healthy relationships.

Comparable data in this area are scarce, but shared responsibilities for reproductive health can be demonstrated by measuring contraceptive prevalence and choice of method. Fig. 4.9 demonstrates that the share of male condom use in modern contraceptive prevalence varies across countries, but in general is low compared to other modern (and traditional) contraceptive methods. These data



Fig. 4.9.

are again limited by the fact that only women of reproductive age, and those who were married or in union, were surveyed.

When looking at contraceptive use among adolescents, condom use is much higher, with an average of 68% of 15-year-old boys who claimed to have had sex reporting using a condom at last intercourse. Variation among countries is large, however, with the highest in Greece (83%) and lowest in Poland (28%) (Inchley et al., 2016). Reported condom use among girls in the same age group is somewhat lower than for boys (62%), which may reflect the choice of other contraceptive methods but may also indicate fewer possibilities for negotiating safe sex.

Looking at gender relations, a recent Swedish survey among 16–29-year-olds shows a higher proportion of girls (73%) than boys (66%) stating that a partner who suggests using a condom is responsible and considerate, while a higher proportion of boys (13%) than girls (9%) stated that a condom is not needed if you already know your partner. The same survey reported that 78% considered it important for both partners to decide equally on how and where to have sex (girls 83%, and lowest among 20–24-year-old boys (74%)) (Public Health Agency of Sweden, 2017).

Much evidence shows that boys want to, and can, change their attitudes, perceptions and behaviours on sexual and reproductive health. It is therefore

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important to recognize and positively transform how boys are socialized to become men in relation to health-seeking behaviour, and to tailor policies and programmes, such as comprehensive sexuality education, to create more inclusive environments for boys and young men (Kato-Wallace et al., 2016).

The WHO European action plan for sexual and reproductive health recommends that countries establish and strengthen evidence-informed comprehensive sexuality education from early years, with a focus on rights and gender equality (WHO Regional Office for Europe, 2016f). Comprehensive sexuality education is a curriculum-based process of teaching and learning about the cognitive, emotional, physical and social aspects of sexuality (UNESCO, 2018b).

The combination of comprehensive sexuality education in schools and related health services has been shown to be an effective way to support young people's sexual and reproductive health. School nurses, for example, can provide additional information and counselling, support classroom activities and refer children and young people to external sexual and reproductive health or other services (UNESCO, 2018b). Schools are primary settings for comprehensive sexuality education, but it is also important to establish mechanisms to reach less easily accessible groups, such as out-of-school children and adolescents (WHO, 2016c).

## Mechanisms for transformative change

## **Political commitment**

Political will and government support are crucial to fostering gender equality and health equity. Leadership and support from senior policy-makers and decision-makers (many of whom are men) is vital to generating good outcomes from gender equality policies for both women and men (WHO Regional Office for Europe, 2016g).

Policy-makers can also play a vital role in increasing the capacity and expertise of governmental structures to address issues of men, gender inequality and health through training and support to programme planning, organizational development and management. They can generate more expertise on men, masculinities and gender equality by building institutional strength through networking and collaboration with research institutions (WHO, 2010c). An example of an innovative toolbox that aims to promote these ideas is shown in Box 4.3.

#### Box 4.3.

## Barbershops for gender equality

The Barbershop Toolbox is part of the HeforShe initiative. Its objective is to mobilize men in becoming responsible agents for change in promoting gender equality. The idea was developed by the governments of Iceland and Suriname and it was launched during the Barbershop Conference at the United Nations headquarters in January 2015. UN Women's HeforShe campaign endeavours to empower voices and encourages action to achieve gender equality across the world in specific areas, including health.

The Barbershop Toolbox contains a range of instruments designed to start men-to-men discussions on the role and impact of gender norms and makes a commitment to promote gender equality. The initiative particularly targets high-level decision-making spaces. Since its launch, the Barbershop has been implemented by the United Nations, North Atlantic Treaty Organization, the Council of Europe, the European Parliament and the European Court of Human Rights (Council of Europe, 2018). Activities include leadership sessions, workshops and engagement enhancement tools. Ultimately, the aim is to involve men in discussion of the harmful impacts of gender inequalities at individual, economic and societal levels, highlight the benefits of gender equality to all, brainstorm on what actions can be taken, and decide how they can be implemented (HeforShe, 2018).

## Intersectoral action

A wealth of research accumulated by WHO and others indicates that health programmes involving multiple sectors achieve better impacts. Effective intersectoral action for gender equality, health equity and better health for women and men require that policy approaches are coherent and mutually reinforcing (WHO Regional Office for Europe, 2016e).

Policy implementation mechanisms for men's health should complement (rather than replace) existing women-specific measures and governance structures. A national health department policy aimed at improving men's health and wellbeing can effectively reflect and coordinate with national intersectoral structures and mechanisms for implementing and monitoring gender equality policy (WHO, 2010c). One of the challenges in the transition to policy implementation within the Irish policy context was to secure buy-in across government departments on policy implementation (Richardson & Smith, 2011).

Community health programmes, such as the integration of fatherhood in postnatal care, support for new fathers, counselling programmes for men and Men's Sheds initiatives (Forum for Mænds Sundhed, 2017) (described in Chapter 3), are also effective vehicles.

Gender budgeting is an important tool for executing gender-responsive policy. It also serves to identify biases that mask inequalities in distribution of resources

critical for better health outcomes for men (and women). Analysis of budgets from a gender perspective allows identification of areas that may require targeted support, such as those identified in previous chapters (WHO Regional Office for Europe, 2016g).

Gender budgeting is a formal process of planning, executing and auditing budgets in a gender-sensitive way. It enables an analysis of how public money is raised and spent, with the aim of strengthening gender equality in decisionmaking about public resource allocation, distribution and impacts, both in terms of their benefits and burdens. It is a tool to monitor if effective policy implementation is in line with policy commitments (Council of Europe, 2015).

The concept is gaining momentum in Europe, with almost half of OECD countries now reporting that they either have introduced it (12), plan to introduce it (two), or are actively considering introducing it (one). Some of these developments have taken place in recent years, including advances in Austria (2013), Israel, the Netherlands, Norway and Sweden (2014), and Iceland (2015) (OECD, 2017b).

## Partnerships with civil society

Civil society movements on men's health and engaging men in their own health and in gender equality have only recently started to emerge, but have had a catalytic effect in developing and evaluating innovative interventions, accelerating research and creating policy change.

An analysis conducted by the European Institute for Gender Equality mapping stakeholders in all EU Member States whose activity could be considered as contributing to more effective involvement of men in promoting gender equality identified 241 relevant organizations, of which 78% were nongovernmental organizations (NGOs). A large majority of the NGOs worked on violence prevention, fatherhood and health. Geographically, organizations were more active in those countries with smaller gender gaps (see Fig. 4.2); there was little activity in countries with higher gaps, leading to the preliminary conclusion that countries with greater gender equality also appear to focus more on work with men (European Institute for Gender Equality, 2011).

Organizations such as the Men's Health Forum in Ireland and the United Kingdom, the Men's Health Society in Denmark, the German Men's Health Foundation and the European Men's Health Forum are active in fostering research, community work, advocacy and capacity-building among providers. The Men's Health Forum in Ireland was fully embedded in the process that led to the development, drafting and implementation of the national men's health policy. Men's health organizations have also developed initiatives for the annual Men's Health Week in June, while Movember is active in raising awareness and funding for specific issues such as prostate cancer, testicular cancer and mental health.

MenEngage Europe is a network of 25 organizations with a wide geographic reach – from Ireland to the Russian Federation and Kyrgyzstan, and from Spain and Malta to Finland – that provides a resource for organizations and individuals working with men and boys primarily to achieve gender equality and end violence. The eastern Europe and central Asia MenEngage Platform is a separate network initiated by the UNFPA Eastern Europe and Central Asia Regional Office. The platform is open to NGOs, civil society organizations, state institutions, experts, government representatives, academics and United Nations partners, and currently has nine members. It aims to address stereotypical gender norms and masculinities, eliminate violence against women and girls, combat harmful practices that foster injustice, and increase access and utilization of sexual and reproductive health rights and services.

Some organizations address particular health concerns and issues, such as men facing discrimination due to sexual orientation or gender identity. These include the Eurasian Coalition on Male Health, a network of organizations providing HIV prevention and treatment for gay men, other men who have sex with men and transgender people in eastern Europe and central Asia.

While many gender equality organizations work on health or health-related issues, health-related organizations still have to catch up with the agenda. The recent Global Health 50/50 report analysed the policies and practices of 140 global health organizations and found that fewer than one third defined gender as relevant to both men and women. Of the 40 NGOs in the sample, 14 stated that they focused exclusively on the health needs of women and girls, but none focused exclusively on the health of men and boys (Global Health 50/50, 2018).

## **Monitoring progress**

The WHO European report on women's health and well-being discussed the importance of disaggregated data and other gender-relevant data for monitoring women's and men's health needs and evaluate the impact of policies. It highlighted the limited availability of such data for policy use and, where they are available, the lack of capacity to translate them through gender analysis into gender-responsive health action. Currently, only 13% of countries globally have a dedicated gender statistics budget (United Nations Economic and Social Council, 2013). A separate target (17.18) has been set in the SDGs to address this gap, and the United Nations minimum set of gender indicators was relaunched within the context of the SDGs in 2017 (United Nations Economic and Social Council, 2013).

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The consultation process to develop the strategy for the health and well-being of men identified the need to develop a strong evidence base to, among other things, better understand the interactions between socioeconomic stature, gender, risk factors, ill health and well-being to better implement effective interventions, monitor impacts and disseminate knowledge, and address the impact of societal changes and innovations on health and well-being.

It also recommended that monitoring and reporting on progress on men's health and their engagement in gender equality be related to the Health 2020 monitoring framework, the SDG targets and indicators, the strategy on women's health and well-being in the WHO European Region and other relevant existing frameworks, to avoid duplication and facilitate accountability.



## **Moving forward**

The evidence gathered and highlighted in this report suggests that action to improve the health and well-being of men would benefit from gender-responsive and equity-driven approaches. Implementation of global and regional strategies addressing some of the key health issues highlighted, such as NCDs and their risk factors, can be accelerated by taking into consideration the issues analysed in the report.

Important gaps were identified during the consultation and evidence-gathering process in sex-disaggregated data, gender analysis and the links between gender and other determinants of health. As was the case with the WHO European women's health strategy and the report developed in 2016, this presents an important challenge; follow-up actions to both strategies should promote the development of a robust body of evidence.

Despite these shortcomings, the evidence gathered in the process of developing the report served to identify some priorities that could guide countries towards:

- reducing premature mortality among men due to NCDs and unintentional and intentional injuries;
- improving health and well-being among men of all ages while reducing inequalities between and within countries of the Region; and
- improving gender equality through structures and policies that advance men's engagement in self-care, fatherhood, unpaid care, violence prevention and sexual and reproductive health.

Priorities and actions to achieve these objectives were further developed through a consultation process with European Region Member States, internal and external experts, civil society, academia and United Nations partner agencies, which were collected in the WHO European strategy for the health and well-being of men that will be discussed at the 68<sup>th</sup> session of the WHO Regional Committee for Europe.

Some of the key considerations necessary to achieve the objectives included in the WHO European strategy on the health and well-being of men are:

- acknowledging that improving the health and well-being of men and contributing to gender equality are complementary objectives;
- developing policies and actions that focus on the promotion and protection of men's health alongside that of women, and breaking down barriers between different programmes instead of reinforcing them;

- strengthening intersectoral mechanisms between the health and education sectors to eliminate gender stereotypes that are harmful to health at all levels of education;
- promoting and facilitating participation of men to take transformative action to improve their own health and the health of communities through collaboration with civil society and the use of places and settings where boys and men can be reached;
- ensuring that measures for health equity specifically consider that gender norms and roles may exacerbate social exclusion, particularly in relation to men who are unemployed, homeless, prisoners, veterans, migrants, of a different ethnic origin from the majority, gay, bisexual, transgender and/or intersex, or who are living with mental illness or disability;
- engaging men in gender equality through learning from positive experiences, transforming patterns of care (including self-care, parenting, care of family and unpaid care), and acting to prevent gender-based violence and improve sexual and reproductive health;
- strengthening gender-responsive health systems that ensure a model of care that makes health services more accessible for boys and men, and which recognize their health needs and health-seeking patterns and address the impact of masculinities on health across the life-course;
- promoting inclusive services and eliminating discriminatory practices, particularly in relation to men who experience social exclusion and marginalization because of their age, ethnicity, sexual orientation, gender identity, homelessness, disability or mental health conditions;
- developing health promotion initiatives that focus on positive images of boys and men, eliminate the use of gender stereotypes, use important life transitions such as adolescence, fatherhood and retirement, and promote more equitable gender roles and relationships; and
- prioritizing interventions to reduce the disproportionate exposure of boys and men to alcohol and tobacco use, substance abuse, road-traffic injuries and suicide.

A more detailed set of recommendations is included in the WHO European strategy for the health and well-being of men, which will serve as a guide for WHO in its efforts to support countries in improving the health and well-being of men through a gender approach.


# **References**<sup>10</sup>

Abbé Pierre Foundation, European Federation of National Organisations Working with the Homeless (2018). Third overview of housing exclusion in Europe 2018. Brussels: Abbé Pierre Foundation, European Federation of National Organisations Working with the Homeless.

Abusarah EA, Awwad ZM, Charvalos E, Shehabi AA (2013). Molecular detection of potential sexually transmitted pathogens in semen and urine specimens of infertile and fertile males. Diagn Microbiol Infect Dis. 77(4):S283–6.

Addati L, Cassirer N, Gilchrist K (2014). Maternity and paternity at work: law and practice across the world. Geneva: International Labour Organization.

Agarwal A, Mulgund A, Hamada A, Cyatte MR (2015). A unique view on male infertility around the globe. Reprod Biol Endocrinol. 13(37):1–9.

Ahrens W, Pigeot I, Pohlabein H, De Henauw S, Lissner L, Molnar D et al. (2014). Prevalence of overweight and obesity in European children below the age of 10. Int J Obes. 38:S99–107.

Altice FL, Azbel L, Stone J, Brooks-Pollock E, Smyrnov P, Dvoriak S et al. (2016). The perfect storm: incarceration and the high-risk environment perpetuating transmission of HIV, hepatitis C virus, and tuberculosis in eastern Europe and central Asia. Lancet 388:1228–48.

Andersen I, Osler M, Petersen L, Grønbæk M, Prescott E (2003). Income and risk of ischaemic heart disease in men and women in a Nordic welfare country. Int J Epidemiol. 32:367–74.

Ang S (2018). Social participation and health over the adult life course: does the association strengthen with age? Soc Sci Med. 206:51–59.

Antonakakis N, Collins A (2014). The impact of fiscal austerity on suicide: on the empirics of a modern Greek tragedy. Soc Sci Med. 112:39–50.

Arber S, Ginn J (1991). Gender and later life: a sociological analysis of resources and constraints. London: Sage.

Artazcoz L, Benach J, Borrell C, Cortès I (2004). Unemployment and mental health: understanding the interactions among gender, family roles, and social class. Am J Public Health 94(1):82–8.

Artazcoz L, Cortès I, Escriba-Aguir V, Cascant L, Villegas R (2009). Understanding the relationship of long working hours with health status and health-related behaviours. J Epidemiol Community Health 63:521–7.

Aspelund T, Gudnason V, Magnusdottir BT, Andersen K, Sigurdsson G, Thorsson B et al. (2010). Analysing the large decline in coronary heart disease mortality in the Icelandic population aged 25–74 between the years 1981 and 2006. PLoS One 5(11):e13957.

Bajekal M, Scholes S, Love H, Hawkins N, O'Flaherty M, Raine R et al. (2012). Analysing recent socioeconomic trends in coronary heart disease mortality in England, 2000–2007: a population modelling study. PLoS Med. 9(6):e1001237.

Baker P (2015a). National men's health policies: can they help? Trends in Urology & Men's Health 6(6):24-6.

Baker P (2015b). Review of national men's health policy and action plan 2008–13: final report for the Health Service Executive. Dublin: Health Service Executive.

Baker P, Shand T (2017). Men's health: time for a new approach to policy and practice? J Glob Health 7:1–10.

Bandosz P, O'Flaherty M, Drygas W, Rutkowski M, Koziarek J, Wyrzykowski B et al. (2012). Decline in mortality from coronary heart disease in Poland after socioeconomic transformation: modelling study. Br Med J. 344:d8136.

Barker G, Ricardo C, Nascimento M, Olukoya A, Santos C (2010). Questioning gender norms with men to improve health outcomes: evidence of impact. Glob Public Health 5:539–53.

Barker G, Contreras JM, Heilman B, Singh AK, Verma RK, Nascimento M (2011). Evolving men: initial results from the International Men and Gender Equality Survey (IMAGES). Washington (DC) and Rio de Janeiro: International Center for Research on Women, Instituto Promundo.

Beach B, Bamford S-M (2014). Isolation: the emerging crisis for older men. A report exploring experiences of social isolation and loneliness among older men in England. London: Independent Age, International Longevity Centre UK.

Ben-Shlomo Y, Kuh D (2002). A lifecourse approach to chronic disease epidemiology: conceptual models, empirical challenges and interdisciplinary perspectives. Int J Epidemiol. 31(2):285–93.

Bennett K, Kabir Z, Unal B, Shelley E, Critchley J, Perry I et al. (2006). Explaining the recent decrease in coronary heart disease mortality rates in Ireland, 1985–2000. J Epidemiol Community Health 60(4):322–7.

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<sup>&</sup>lt;sup>10</sup> All weblinks accessed 20 August 2018.

Bettio F, Verashchagina A (2012). Long-term care for the elderly. Provisions and providers in 33 European countries. Luxembourg: Publications Office of the European Union.

Björck L, Rosengren A, Bennett K, Lappas G, Capewell S (2009). Modelling the decreasing coronary heart disease mortality in Sweden between 1986 and 2002. Eur Heart J. 30(9):1046–56.

Blabanaova D, McKee M (2002). Access to health care in a system transition: the case of Bulgaria. Int J Health Plann Mgmt. 17:377–95.

Blank L, Baxter S, Buckley Woods H, Goyder E, Lee E, Payne N et al. (2015). What is the evidence on interventions to manage referral from primary to specialist non-emergency care? A systematic review and logic model synthesis. Health Services and Delivery Research 3(24).

Bloemen H, Hochguertel S, Zweerink J (2017). The causal effect of retirement on mortality: evidence from targeted incentives to retire early. Health Econ. 26(2):e204–18.

Bogle V (2013). A review of the literature: men's health-seeking behaviour and use of the internet. London: Men's Health Forum.

Bono E, Sala E, Hancock R (2008). Older carers in the UK: are there really gender differences? New analysis of the individual sample of anonymised records from the 2001 UK Census. Health Soc Care Community 17(3):267–73.

Boston J, Gill D (2011). Joint or shared accountability: issues and options. Wellington: University of Wellington, Institute of Policy Studies (Working paper 11/03).

Bots ML, Grobbee DE (1996). Decline of coronary heart disease mortality in the Netherlands from 1978 to 1985: contribution of medical care and changes over time in presence of major cardiovascular risk factors. J Cardiovasc Risk 3(3):271–6.

Bowpitt G, Dwyer P, Sundin E, Weinstein M (2011). Comparing men's and women's experiences of multiple exclusion homelessness. Soc Policy Soc 10:537–46.

Bracke P, Christiaens W, Wauterickx N (2008). The pivotal role of women in informal care. J Fam Issues 29(10):1348–78.

Brandt M, Haberkern K, Szydlik M (2009). Intergenerational help and care in Europe. Eur Sociol Rev. 25(5):585-601.

Briggs ADM, Mytton OT, Kehlbacher A, Tiffin R, Elhussein A, Rayner M et al (2017). Health impact assessment of the UK soft drinks industry levy: a comparative risk assessment modelling study. Lancet Public Health 2:e15–22.

Brookings C, Goldmeier D, Sadeghi-Nejad H (2013). Sexually transmitted infection and sexual function in relation to male fertility. Korean J Urol. 54(3):149–56.

Broom DH. Men's health and women's health – deadly enemies or strategic allies? Crit Public Health 2009;19(3–4):269–77.

Bruthans J, Cífková R, Lánská V, O'Flaherty M, Critchley JA, Holub J et al. (2012). Explaining the decline in coronary heart disease mortality in the Czech Republic between 1985 and 2007. Eur J Prev Card. 21(7):829–39.

Burki TK (2013). Homelessness and respiratory disease. Lancet Respir Med. 1:767–8.

Calvo E, Sarkisian N, Tamborini CR (2013). Causal effects of retirement timing on subjective physical and emotional health. J Gerontol B Psychol Sci Soc Sci. 68(1):73–84.

Campbell L, Martin-Matthews A (2003). The gendered nature of men's filial care. J Gerontol B Psychol Sci Soc Sci. 58(6):S350–8.

Capewell S, Morrison C, McMurray J (1999). Contribution of modern cardiovascular treatment and risk factor changes to the decline in coronary heart disease mortality in Scotland between 1975 and 1994. Heart 81(4):380–6.

Capewell S, Beaglehole R, Seddon M, McMurray J (2000). Explanation for the decline in coronary heart disease mortality rates in Auckland, New Zealand, between 1982 and 1993. Circulation 102:1511–6.

Carretero MT (2014). Primary health care use from the perspective of gender and morbidity burden. BMC Womens Health 14(1):145.

Carrigan T, Connell B, Lee J (1985). Toward a new sociology of masculinity. Theory Soc. 14:551–604.

Carroll A (2014). Testing the waters: LGBT people in Europe and Eurasia. Washington (DC): USAID.

Carroll A, Quinn S (2009). Forced out: LGBT people in Armenia. Report on ILGA-Europe/COC fact-finding mission. Brussels, Amsterdam: ILGA Europe, COC Netherlands.

Cashin C (2000). Governmental pharmaceutical subsidy policy and the demand for health care in Russia: evidence from the Russia Longitudinal Monitoring survey. Seatle (WA): University of Washington, Department of Economics.

Centre for Public Health, Faculty of Health & Applied Social Science, Liverpool John Moores University (2011). A summary of the health harms of drugs. London: Department of Health.

Charlton KE (1999). Elderly men living alone: are they at high nutritional risk? J Nutr Health Aging 3(1):42–7.

Chestnov O, Farrington J, Galea G (2016). Action plan for the prevention and control of noncommunicable diseases (NCDs) in the WHO European Region [online presentation]. In: WHO Regional Office for Europe [website]. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/about-us/governance/regional-committee-for-europe/past-sessions/66th-session/ speeches-and-presentations/presentation-action-plan-for-the-prevention-and-control-of-noncommunicable-diseases-ncds-in-the-who-european-region).

Commission on Social Determinants of Health (2008). Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health. Geneva: World Health Organization (http://www.who.int/social\_determinants/thecommission/finalreport/en/).

Committee on Public Health Strategies to Improve Health (2011). For the public's health: the role of measurement in action and accountability. Washington (DC): Institute of Medicine.

Connell RW (1998). Masculinities and globalization. Men Masc. 1(1)3–23.

Connell RW (2012). Gender, health and theory: conceptualizing the issue, in local and world perspective. Soc Sci Med. 74:1675-83.

Cooper L, Caddick N, Godier L, Cooper A, Fossey M (2018). Transition from the military into civilian life: an exploration of cultural competence. Armed Forces Soc. 44:156–77.

Council of Europe (2015). Gender equality glossary. Strasbourg: Council of Europe.

Council of Europe (2018). Barbershop about how to involve more men in promoting gender equality and combatting sexism [online news release]. Strasbourg: Council of Europe (http://www.coe.int/en/web/portal/-/barbershop-about-how-to-involve-more-men-in-promoting-gender-equality-and-combatting-sexism).

Courtenay WH (1998). College men's health: an overview and a call to action. J Am Coll Health 46(6):279–90.

Courtenay WH (2000). Constructions of masculinity and their influence on men's well-being: a theory of gender and health. Soc Sci Med. 50(10):1385–401.

Courtenay W (2002). A global perspective on the field of men's health: an editorial. Int J Mens Health 1(1)1–13.

Courtenay WH (2003). Key determinants of the health and well-being of men and boys. Int J Mens Health 2(1):1–30.

Dahlberg L, Demack S, Bambra C (2007). Age and gender of informal carers: a population-based study in the UK. Health Soc Care Community 15(5):439–45.

Dahlin J, Härkönen J (2013). Cross-national differences in the gender gap in subjective health in Europe: does country-level gender equality matter? Soc Sci Med. 98:24–8.

Davaki K (2016). Differences in men's and women's work, care and leisure time. A study for Directorate General for Internal Policies, Policies Department C: Citizens' Rights and Constitutional Affairs, Gender Equality. Brussels: European Parliament.

Davidson S, Rossall P (2015). Evidence review: loneliness in later life. London: AgeUK.

de Keizer B, Mendoza F, Valenzuala A, Ovando I, Cortez E, Loya A (in press). Masculinidades y salud [Masculinities and health]. Washington (DC): Pan American Health Organization (in Spanish).

de Looze M, Pickett W, Raaijmakers Q, Kuntsche E, Hublet A, Nic Gabhainn S et al. (2012). Early risk behaviors and adolescent injury in 25 European and North American countries: a cross-national consistent relationship. Journal of Early Adolescenc. 32:101–22.

de Looze M, ter Bogt TFM, Hublet A, Kuntsche E, Richter M, Zsiros E et al. (2013). Trends in educational differences in adolescent daily smoking across Europe, 2002–2010. Eur J Public Health 23:846–52.

de Looze M, Raaijmakers Q, Ter Bogt T, Bendtsen P, Farhat T, Ferreira M et al. (2015). Decreases in adolescent weekly alcohol use in Europe and North America: evidence from 28 countries from 2002 to 2010. Eur J Public Health 25(Suppl. 2):69–72.

de Looze M, Huijts T, Stevens G, Torsheim T, Vollebergh W (2017). The happiest kids on earth. Gender equality and adolescent life satisfaction in Europe and North America. J Youth Adolesc. 47(5):1073–85.

de Visser RO, Smith J (2007). Alcohol consumption and masculine identity among men. Psychol Health 22:595-614.

Department of Health (2013). Healthy Ireland: a framework for improved health and wellbeing 2013–2025. Dublin: Department of Health.

Department of Health (2016). National men's health action plan. Healthy Ireland – men. HI-M 2017–2021. Dublin: Department of Health.

Department of Health and Children (2008). National men's health policy 2008 – 2013: working with men in Ireland to achieve optimum health and wellbeing. Dublin: The Stationery Office.

Dempster S (2011). I drink, therefore I'm a man: gender discourses, alcohol and the construction of British undergraduate masculinities. Gend Educ. 23(5):635–53.

Dolan A, Lomas T, Ghobara T, Hartshorne G (2017). "It's like taking a bit of masculinity away from you": towards a theoretical understanding of men's experiences of infertility. Sociol Health Illn. 39(6):878–92.

Dolan K, Wirtz AL, Moazen B, Ndeffo-Mbah M, Galvani A, Kinner SA et al. (2016). Global burden of HIV, viral hepatitis, and tuberculosis in prisoners and detainees. Lancet 388:1089–102.

Dorling D, Rigby J, Wheeler B, Ballas D, Thomas B, Fahmy E et al. (2007). Poverty, wealth and place in Britain, 1968 to 2005. Bristol: The Policy Press for the Joseph Rowntree Foundation.

Drope J, Schluger N, Cahn Z, Drope J, Hamill S, Islami F et al. (2018). The tobacco atlas. Atlanta (GA): American Cancer Society and Vital Strategies.

Dykstra PA (2009). Older adult loneliness: myths and realities. Eur J Ageing 6(2):91–100.

Elgar FJ, Pförtner T, Moor I, De Clercq B, Stevens GWJM, Currie C (2015). Socioeconomic inequalities in adolescent health 2002–2010: a time-series analysis of 34 countries participating in the Health Behaviour in School-aged Children study. Lancet 385(9982):2088–95.

Elliott MN, Kanouse DE, Burkhart Q, Abel GA, Lyratzopoulos G, Beckett MK et al. (2014). Sexual minorities in England have poorer health and worse health care experiences: a national survey. J Gen Intern Med. 30(1):9–16.

Emilsson UM, Stahl A (2016). Good personal finances or a strong social capital – on different life conditions of importance for an active life when becoming alone in old age. European Journal of Social Work 19(5):749–63.

Emslie C, Hunt K (2008). The weaker sex? Exploring lay understandings of gender differences in life expectancy: a qualitative study. Soc Sci Med. 67(5):808–16.

Emslie C, Hunt K (2009). Men, masculinities and heart disease. Curr Sociol. 57(2):155-91.

Engelhardt H, Buber I, Skirbekk V, Prskawetz A (2010). Social involvement, behavioural risks and cognitive functioning among older people. Ageing Soc. 30:779–809.

Enggist S, Møller L, Galea G, Udesen C (2014). Prisons and health. Copengahen: WHO Regional Office for Europe (http://www. euro.who.int/\_\_data/assets/pdf\_file/0005/249188/Prisons-and-Health.pdf).

European Centre for Disease Prevention and Control, WHO Regional Office for Europe (2017). HIV/AIDS surveillance in Europe 2017 – 2016 data. Stockholm: European Centre for Disease Prevention and Control.

European Centre for Disease Prevention and Control, WHO Regional Office for Europe (2018). Tuberculosis surveillance and monitoring in Europe 2018. Stockholm: European Centre for Disease Prevention and Control.

European Commission (2010). Access to healthcare and long-term care: equal for women and men? Luxembourg: Publications Office of the European Union.

European Commission (2014) Report on discrimination of Roma children in education. Luxembourg: Publications Office of the European Union.

European Commission (2017). Health 4 LGBTI. Reducing health inequalities experienced by LGBTI people – synthesis report. Luxembourg: Publications Office of the European Union.

European Court of Human Rights (1950). European Convention on Human Rights. Strasbourg: European Court of Human Rights.

European Heart Network (2017). European cardiovascular disease statistics. 2017 edition. Brussels: European Heart Network.

European Institute for Gender Equality (2011). The involvement of men in gender equality initiatives in the European Union – study report. Luxembourg: Publications Office of the European Union.

European Men's Shed (2018). European Men's Shed [website]. Wexford: European Men's Shed.

European Parliament (2007). European Parliament resolution of 26 April 2007 on homophobia in Europe. Brussels: European Parliament (P6\_TA(2007)0167).

European Social Survey (2012). Variable fltlnl: felt lonely, how often past week. In: ESS data [online database]. London: European Social Survey (http://nesstar.ess.nsd.uib.no/webview/index.jsp?v=2&submode=variable&study=http%3A%2F%2 F129.177.90.83%3A-1%2Fobj%2FfStudy%2FESS6e02.3&gs=undefined&variable=http%3A%2F%2F129.177.90.83%3A80%2-Fobj%2FfVariable%2FESS6e02.3\_V201&mode=documentation&top=yes).

European Society of Cardiology (2018). Score risk charts. In: European Society of Cardiology [website]. Sophia Antipolis Cedex: European Society of Cardiology (https://www.escardio.org/Education/Practice-Tools/CVD-prevention-toolbox/SCORE-Risk-Charts).

European Union Agency for Fundamental Rights (2013). Inequalities and multiple discrimination in access to and quality of healthcare. Luxembourg: Publications Office of the European Union.

European Union Agency for Fundamental Rights (2016). Professionally speaking: challenges to achieving equality for LGBT people. Luxembourg: Publications Office of the European Union.

Eurosafe (2008). ADRISK (European Action on Adolescent and Injury Risk). Policy briefing 9. Risk taking and injuries among young people. Amsterdam: Eurosafe.

Eurostat (2010). Combating poverty and social exclusion: a statistical portrait of the European Union. Luxembourg: Publications Office of the European Union.

Eurostat (2017). Self-reported consultations of a medical professional by sex, age and educational attainment level [online database]. In: Eurostat [website]. Luxembourg: Eurostat (http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth\_ehis\_am2e&lang=en).

Eurostat (2018a). Life expectancy by age, sex and educational attainment level [online database]. In: Eurostat [website]. Luxembourg: Eurostat (http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo\_mlexpecedu&lang=en).

Eurostat (2018b). Employment by sex, age and economic activity (from 2008 onwards, NACE Rev. 2) – 1 000 [online database]. In: Eurostat [website]. Luxembourg: Eurostat (http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfsa\_egan2&lang=en).

Eurostat (2018c). Accidents at work by sex, age and NACE Rev. 2 activity (A, C-N) [online database]. In: Eurostat [website]. Luxembourg: Eurostat (http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hsw\_mi01&lang=en).

Eurostat (2018d). Asylum applicants considered to be unaccompanied minors by citizenship, age and sex. Annual data (rounded) [online database]. In: Eurostat [website]. Luxembourg: Eurostat (http://appsso.eurostat.ec.europa.eu/nui/show. do?dataset=migr\_asyunaa&lang=en).

Eurostat (2018e). Health care activities statistics – consultations. In: Eurostat [website]. Luxembourg: Eurostat (http://ec.europa. eu/eurostat/statistics-explained/index.php/Healthcare\_activities\_statistics\_-consultations).

Eurostat (2018f). Self-reported unmet needs for medical examination by sex, age, main reason declared and educational attainment level [online database]. In: Eurostat [website]. Luxembourg: Eurostat (http://appsso.eurostat.ec.europa.eu/nui/show. do?dataset=hlth\_silc\_14&lang=en).

Eurostat (2018g). Self-reported unmet needs for health care by sex, age, specific reasons and educational attainment level [online database]. In: Eurostat [website]. Luxembourg: Eurostat (http://appsso.eurostat.ec.europa.eu/nui/show. do?dataset=hlth\_ehis\_un1e&lang=en).

Evans J, Frank B, Oliffe JL, Gregory D (2011). Health, illness, men and masculinities (HIMM): a theoretical framework for understanding men and their health. J Mens Health Gender 8(1):7–15.

Fazel S, Seewald K (2012). Severe mental illness in 33 588 prisoners worldwide: systematic review and meta-regression analysis. Br J Psychiatry 200:364–73.

Fazel S, Ramesh T, Hawton K (2017). Suicide in prisons: an international study of prevalence and contributory factors. Lancet Psychiatry 4:946–52.

Ferrant G, Pesando LM, Nowacka K (2014). Unpaid care work: the missing link in the analysis of gender gaps in labour outcomes. Paris: OECD.

Figueroa-Perea J (2003). A gendered perspective on men's reproductive health. Int J Mens Health 2(2):111–30.

Fitzpatrick S, Bramley G, Johnsen S (2012). Pathways into multiple exclusion homelessness in seven UK cities. Urban Stud. 50:148–68.

Fleming P, Gruskin S, Rojo F, Dworkin S (2015). Men's violence against women and men are inter-related: recommendations for simultaneous intervention. Soc Sci Med. 146:249–56.

Flores-Mateo G, Grau M, O'Flaherty M, Ramos R, Elosua R, Violan-Fors C et al. (2011). Analyzing the coronary heart disease mortality decline in a Mediterranean population: Spain 1988–2005. Rev Esp Cardiol. 64:988–96.

Flurey CA, Hewlett S, Rodham K, White A, Noddings R, Kirwan JR (2017). "You obviously just have to put on a brave face": a qualitative study of the experiences and coping styles of men with rheumatoid arthritis. Arthritis Care Res (Hoboken) 69(3):330–7.

Fokkema T, Liefbroer A (2008). Trends in living arrangements in Europe. Demographic Research 19(36):1351-418.

Folbre N, Nelson J (2000). For love or money - or both? J Econ Perspect. 14(4):123-40.

Ford ES, Ajani UA, Croft JB, Critchley JA, Labarthe DR, Kottke TE (2007). Explaining the decrease in U.S. deaths from coronary disease, 1980–2000. New Eng J Med. 356(23):2388–98.

Fortin NM, Oreopoulos P, Phipps S (2015). Leaving boys behind: gender disparities in high academic achievement. J Hum Resour. 50:549–79.

Forum for Mænds Sundhed (2017). Fædre og sundheds-væsenet. Copenhagen: Forum for Mænds Sundhed (in Danish).

Freccero J, Biswas D, Whiting A, Seelinger KT (2017). Sexual exploitation of unaccompanied migrant and refugee boys in Greece: approaches to prevention. PLOS Med. 14:e1002438.

Freedman DS, Khan LK, Serdula MK, Dietz WH, Srinivasan SR, Berenson GS (2005). The relation of childhood BMI to adult adiposity: the Bogalusa Heart Study. Pediatrics 115(1):22–7.

Fulu E, Warner X, Miedema S, Jewkes R, Roselli T, Lang J (2013). Why do some men use violence against women and how can we prevent it? Quantitative findings from the United Nations Multi-Country Study on Men and Violence in Asia and the Pacific. Bangkok: UNDP, UNFPA, UN Women and UNV.

Fursman L, Callister P (2009). Men's participation in unpaid care. A review of literature. Wellington: Department of Labour and the Ministry of Women's Affairs.

Galdas PM, Cheater F, Marshall P (2005). Men and health help-seeking behaviour: literature review. J Adv Nurs. 2005;49:616–23.

Galdas P, Darwin Z, Fell J, Kidd L, Bower P, Blickem CH (2015). A systematic review and metaethnography to identify how effective, cost-effective, accessible and acceptable self-management support interventions are for men with long-term conditions (SELF-MAN). Health Services and Delivery Research 3(34).

Gaymu J, Delbès C, Springer S, Binet A, Désesquelles A, Kalogirou S et al. (2006). Determinants of the living arrangements of older people in Europe. Eur J Popul. 22(3):241–62.

Gaymu J, Springer S (2010). Conditions and life satisfaction of older Europeans living alone: a gender and cross-country analysis. Ageing Soc. 30:1153–75.

Gimenes F, Medina FS, Abreau AL, Irie MM, Esquiçati IB, Malgutti N et al. (2014). Sensitive simultaneous detection of seven sexually transmitted agents in semen by multiplex PCR and of HPV by single PCR. PLOS One 9(6):e98862.

Global Health 50/50 (2018). The Global Health 50/50 report: how gender-responsive are the world's most influential global health organisations? London: Global Health 50/50.

Goldman L, Cook EF (1984). The decline in ischemic heart disease mortality rates: an analysis of the comparative effects of medical interventions and changes in lifestyle. Ann Intern Med. 101:825–36.

Goll J, Charlesworth G, Scior K, Stott J (2015). Barriers to social participation among lonely older adults: the influence of social fears and identity. PloS One 10(2):e0116664.

Goth US, Smaland E (2014). The role of civic engagement for men's health and well being in Norway – a contribution to public health. Int J Environ Res Public Health 11(6):6375–87.

Government Offices of Sweden (2016). Power, goals and agency – a feminist policy for a gender-equal future. Stockholm: Government Offices of Sweden (Govt. Comm 2016/17:10).

Graham H (2002). Building an inter-disciplinary science of health inequalities: the example of life-course research. Soc Sci Med. 55(11):2006–16.

Greer S, Wismar M, Kosinska M (2015). Towards intersectoral governance: lessons learned from health system governance. Public Health Panorama 1(2):128–32.

Gulliford J, Shannon D, Taskila T, Wilkins D, Tod M, Bevan S (2014). Sick of being unemployed: the health issues of out of work men and how support services are failing to address them. London: Men's Health Forum.

Gunnell KE, Flament MF, Buchholz A, Henderson KA, Obeid N, Schubert N et al. (2016). Examining the bidirectional relationship between physical activity, screen time, and symptoms of anxiety and depression over time during adolescence. Prev Med. 88:147–52.

Hagström A, Hollander A-C, Mittendorfer-Rutz E (2018). Mapping of self-harming, attempted suicide, suicide and other mortality among unaccompanied child and adolescent refugees. Solna: Karolinska Institutet.

Hallerod B, Orestig J, Stattin M (2013). Leaving the labour market: the impact of exit routes from employment to retirement on health and wellbeing in old age. Eur J Ageing 10(1):25–35.

Hauksdóttir A, Valdimarsdottir U, Furst CJ, Steineck G (2013). Long-term mental health of men who lose a wife to cancer: a population-based follow-up. Psycho-Oncology 22(2):352–61.

Have M, de Graaf R, Ormel J, Vilagut G, Kovess V, Alonso J (2010). Are attitudes towards mental health help-seeking associated with service use? Results from the European Study of Epidemiology of Mental Disorders. Soc Psychiatry Psychiatr Epidemiol. 45(2):153–63.

Hawkes S, Buse K (2013). Gender and global health: evidence, policy, and inconvenient truths. Lancet 381:1783–7.

Hawkley LC, Cacioppo JT (2010). Loneliness matters: a theoretical and empirical review of consequences and mechanisms. Ann Behav Med. 40(2):218–27.

HeforShe (2018). The barbershop toolbox. In: HeforShe [website]. New York (NY): UN Women (http://www.heforshe.org/en/barbershop).

Heath PJ, Seidman AJ, Vogel DL, Cornish MA, Wade NG (2017). Help-seeking stigma among men in the military: the interaction of restrictive emotionality and distress. Psychol Men Masc. 18(3):193–7.

Heilman B, Levtov R, van der Gaag N, Hassink A, Barker G (2017). State of the world's fathers: time for action. Washington (DC): Sonke Gender Justice, Save the Children and MenEngage Alliance.

Henry PJ, Wetherell G (2017). Countries with greater gender equality have more positive attitudes and laws concerning lesbians and gay men. Sex Roles 77:523–32.

Herman KM, Hopman WM, Sabiston CM (2015). Physical activity, screen time and self-rated health and mental health in Canadian adolescents. Prev Med. 73:112–6.

Hernán M, Morgan A, Mena AL (2010). Formación en salutogénesis y activos para la salud [Training in salutogenesis and assets for health]. Granada: Andalusian School of Public Health (in Spanish).

Higgins A, Doyle L, Downes C, Murphy R, Sharek D, DeVries J et al. (2016). The LGBTIreland report: national study of the mental health and wellbeing of lesbian, gay, bisexual, transgender and intersex people in Ireland. Dublin: GLEN, BeLonG To.

Hippisley-Cox J, Coupland C, Vinogradova Y, Robson J, May M, Brindle P (2007). Derivation and validation of QRISK, a new cardiovascular disease risk score for the United Kingdom: prospective open cohort study. Br Med J. 335(7611):136–41.

Hirst, M. (2002). Transitions to informal care in Great Britain during the 1990s. J Epidemiol Community Health 56:579-87.

Holter ØG (2014). "What's in it for men?" Old question, new data. Men Masc. 17(5):515–48.

Hotchkiss JW, Davies CA, Dundas R, Hawkins N, Jhund PS, Scholes S et al. (2014). Explaining trends in Scottish coronary heart disease mortality between 2000 and 2010 using IMPACTSEC model: retrospective analysis using routine data. Br Med J. 348:g1088.

Hublet A, Bendtsen P, de Looze M, Fotiou A, Donnelly P, Vilhjalmsson R et al. (2005). Educational inequalities in cause-specific mortality in middle-aged and older men and women in eight western European populations. Lancet 365:493–500.

Huisman M, Kunst AE, Bopp M, Borgan JK, Borrell C, Costa G et al. (2005). Educational inequalities in cause-specific mortality in middle-aged and older men and women in eight western European populations. Lancet 365:493–500.

Human Rights Watch (2018). World report 2018: events of 2017. New York (NY): Human Rights Watch.

Hunink MGM, Goldman L, Tosteson ANA, Mittleman MA, Goldman PA, Williams LW et al. (1997). The recent decline in mortality from coronary heart disease, 1980–1990: the effect of secular trends in risk factors and treatment. JAMA 277(7):535–42.

Hyde MK, Newton RU, Galvão DA, Gardiner RA, Occhipinti S, Lowe A et al. (2017). Men's help-seeking in the first year after diagnosis of localised prostate cancer. Eur J Cancer Care (Engl.) 26(2):e12497.

Imamura F, Micha R, Khatibzadeh S, Fahimi S, Shi P, Powles J et al. (2015). Dietary quality among men and women in 187 countries in 1990 and 2010: a systematic assessment. Lancet Glob Health 3:e132–42.

Inchley J, Currie D, Young T, Samdal O, Torsheim T, Augustson L et al., editors (2016). Growing up unequal: gender and socioeconomic differences in young people's health and well-being. Health Behaviour in School-aged Children (HBSC) study: international report from the 2013/2014 survey. Copenhagen: WHO Regional Office for Europe (Health Policy for Children and Adolescents, No. 7; http://www.euro.who.int/en/publications/abstracts/growing-up-unequal.-hbsc-2016-study-20132014-survey).

Inchley J, Currie D, Jewell J, Breda J, Barnekow V, editors (2017) Adolescent obesity and related behaviours: trends and inequalities in the WHO European Region, 2002–2014. Observations from the Health Behaviour in School-aged Children (HBSC) WHO collaborative cross-national study. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/\_\_data/assets/pdf\_file/0019/339211/WHO\_ObesityReport\_2 017\_v3.pdf).

Institute for Health Metrics and Evaluation (2018). GBD results too. In: GHDx [online database]. Seattle (WA): Institute for Health Metrics and Evaluation (http://ghdx.healthdata.org/gbd-results-tool?params=gbd-api-2016-permalink/5cb30d0393cf608f68e3 ae7498a71449).

International Agency for Research on Cancer (2004). IARC monographs on the evaluation of carcinogenic risks to humans. Volume 83. Tobacco smoke and involuntary smoking. Lyon: International Agency for Research on Cancer.

International Agency for Research on Cancer, WHO (2012). GLOBOCAN 2012: estimated cancer incidence, mortality and prevalence worldwide in 2012 [online database]. Lyon: International Agency for Research on Cancer (http://globocan.iarc.fr/ Pages/summary\_table\_site\_sel.aspx).

International Organization for Migration (2018). Counter-Trafficking Data Collaborative dataset [online database]. Le Grand-Saconnex: International Organization for Migration (https://www.ctdatacollaborative.org/).

Irish Men's Shed Association (2016). About: who we are. In: Irish Men's Shed Association [website]. Dublin: Irish Men's Shed Association (http://menssheds.ie/about-us/).

Jackson R, Stewart A, Beaglehole R (1990). Trends in coronary heart disease mortality and morbidity in Auckland, New Zealand, 1974–1986. Int J Epidemiol. 19(2):279–83.

Kandler U, Meisinger C, Baumert J, Löwel H (2007). Living alone is a risk factor for mortality in men but not women from the general population: a prospective cohort study. BMC Public Health 7(1):335.

Kapur A, Muddell K (2016). When no one calls it rape: addressing sexual violence against men and boys in transitional contexts. New York (NY): ICTJ.

Karanikolos M, Mladovsky P, Cylus J, Thomson S, Basu S, Stuckler D et al. (2013). Financial crisis, austerity, and health in Europe. Lancet 381:1323–31.

Karttunen JP, Rautiainen RH, Lunner-Kolstrup C (2016). Occupational health and safety of Finnish dairy farmers using automatic milking systems. Front Public Health 4:147.

Kato-Wallace J, Barker G, Sharafi L, Mora L, Lauro G (2016). Adolescent boys and young men: engaging them as supporters of gender equality and health and understanding their vulnerabilities. Washington (DC): Promundo US.

Kawachi I, Subramanian SV, Almeida Filho N (2002). A glossary for health inequalities. J Epidemiol Community Health 56(9):647–52.

Kharicha K, Iliffe S, Harari D, Swift C, Gillmann G, Stuck AE (2007). Health risk appraisal in older people: are older people living alone an "at-risk" group? Br J Gen Pract. 57(537):271–6.

Kierans C, Robertson S, Mair M (2007). Formal health services in informal settings: findings from the Preston Men's Health Project. J Mens Health Gend. 4:440–7.

Koletić G (2017). Longitudinal associations between the use of sexuality explicit material and adolescents' attitudes and behaviours: a narrative review of studies. J Adolesc. 57:119–33.

Konstantinov B, Cortez C, Hamelmann C (2016). Being LGBTI in eastern Europe: reducing inequalities & exclusion, and combating homophobia & transphobia experienced by LGBTI people in Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, and Serbia. New York (NY); United Nations Development Programme.

Krienert J, Walsh J, Lech L (2014). Alternatives to abstinence: the practice of (un)safe sex in prison. Crim Justice Stud. 27:387–401.

Kuntsche E, Ravens-Sieberer U (2015). Monitoring adolescent health behaviours and social determinants cross-nationally over more than a decade: introducing the Health Behaviour in School-aged Children (HBSC) study supplement on trends. Eur J Public Health 25(Suppl. 2):1–3.

Kushnir VA, Lewis W (2011). Human immunodeficiency virus/acquired immunodeficiency syndrome and infertility: emerging problems in the era of highly active antiretrovirals. Fertil Steril. 96(3):546–53.

Laatikainen T, Critchley J, Vartiainen E, Salomaa V, Ketonen M, Capewell S (2005). Explaining the decline in coronary heart disease mortality in Finland between 1982 and 1997. Am J Epidemiol. 162(8):764–73.

Lappalainen K, Manninen P, Räsänen K (2017). Association among sociodemograhic factors, work ability, health behavior, and mental health status for young people after prolonged unemployment. Workplace Health Saf. 65(2):65–73.

Levtov R, Van der Gaag N, Greene M, Kaufman M, Barker G (2015). State of the world's fathers. Washington (DC): Promundo, Rutgers, Save the Children, Sonke Gender Justice and the MenEngage Alliance.

Lloyd-Jones DM, Wilson PWF, Larson MG, Beiser A, Leip EP, D'agostino RB et al. (2004). Framingham risk score and prediction of lifetime risk for coronary heart disease. Am J Cardiol. 94(1):20–4.

Lundin A, Falkstedt D, Lundberg I, Hemmingsson T (2014). Unemployment and coronary heart disease among middle-aged men in Sweden: 39 243 men followed for 8 years. Occup Environ Med. 71(3):183–8.

Luo Y, Hawkley LC, Waite LJ, Cacioppo JT (2012). Loneliness, health, and mortality in old age: a national longitudinal study. Soc Sci Med. 2012;74(6):907–14.

Lyons AC, Willott SA (2008). Alcohol consumption, gender identities and women's changing social positions. Sex Roles 59:694–712.

Mackenbach JP, Bopp M, Deboosere P, Kovacs K, Leinsalu M, Martikainen P et al. (2017). Determinants of the magnitude of socioeconomic inequalities in mortality: a study of 17 European countries. Health Place. 47:44–53.

Månsson E (2014). Drinking as a feminine practice: post-feminist images of women's drinking in Swedish women's magazines. Feminist Media Studies 14(1):56–72.

Maras D, Flament MF, Murray M, Buchholz A, Henderson KA, Obeid N et al. (2015). Screen time is associated with depression and anxiety in Canadian youth. Prev Med. 73:133–8.

Marcos-Marcos J, Romo-Avilés N, del Río-Lozano M, Palomares-Cuadros J, García-Calvente M (2013). Performing masculinity, influencing health: a qualitative mixed-methods study of Spanish young men. Glob Health Action 6:21134.

Marmot M (2004). Status syndrome: how your social standing directly affects your health and life expectancy. London: Bloomsbury.

Marmot Review Team (2010). Fair society, healthy lives: a strategic review of inequalities in England post 2010. London: University College London.

Marshal MP, Friedman MS, Stall R, King KM, Miles J, Gold MA et al. (2008). Sexual orientation and adolescent substance use: a meta-analysis and methodological review. Addiction 103(4):546–56.

Martikainen P, Nihtilä E, Moustgaard H (2008). The effects of socioeconomic status and health on transitions in living arrangements and mortality: a longitudinal analysis of elderly Finnish men and women from 1997 to 2002. J Gerontol B Psychol Sci Soc Sci. 63(2):S99–109.

Mathieson K, Kronenfeld J, Keith V (2002). Maintaining functional independence in elderly adults: the roles of health status and financial resources in predicting home modifications and use of mobility equipment. Gerontologist 42(1):24–31.

McLean IA (2013). The male victim of sexual assault. Best Pract Res Cl Ob. 27(1):39-46.

McVicar D, Moschion J, van Ours JC (2015). From substance use to homelessness or vice versa? Soc Sci Med. 136–137:89–98.

MenEngage (2014). Men, masculinities and changing power. A discussion paper on engaging men in gender equality from Beijing 1995 to 2015. New York (NY): MenEngage, UN Women, UNFPA.

Miklavec K, Pravst I, Raats MM, Pohar J (2016). Front of package symbols as a tool to promote healthier food choices in Slovenia: accompanying explanatory claim can considerably influence the consumer's preferences. Food Res Int. 90:235–43.

Milligan C, Payne S, Bingley A, Cockshott Z (2015). Place and wellbeing: shedding light on activity interventions for older men. Ageing Soc. 35(1):124–49.

Möller-Leimkühler AM (2002). Barriers to help-seeking by men: a review of sociocultural and clinical literature with particular reference to depression. J Affect Disord. 71(1–3):1–9.

Monsivais P, Martin A, Suhrcke M, Forouhi NG, Wareham NJ (2015). Job-loss and weight gain in British adults: evidence from two longitudinal studies. Soc Sci Med. 143:223–31.

Moore MW, Barner JR (2017). Sexual minorities in conflict zones: a review of the literature. Aggress Violent Behav. 35:33–7.

Movsisyan N, Sochor O, Kralikova E, Cifkova R, Ross H, Lopez-Jimenez F (2016). Current and past smoking patterns in a central European urban population: a cross-sectional study in a high-burden country. BMC Public Health 16:571.

Mozaffarian D, Fahimi S, Singh GM, Micha R, Khatibzadeh S, Engell RE et al. (2014). Global sodium consumption and death from cardiovascular causes. N Engl J Med. 371(7):624–34.

Mullen K, Watson J, Swift J, Black D (2007). Young men, masculinity and alcohol. Drug-Educ Prev Polic. 14(2):151-65.

NHS Choices (2018). Complications. Mumps. In: NHS Choices [website]. Leeds: NHS England (https://www.nhs.uk/conditions/ mumps/complications/).

Noone JH, Stephens C (2008). Men, masculine identities and health care utilisation. Sociol Health Illn. 30(5):711–25.

O'Donnell S, Richardson N (2018). Middle-aged men and suicide in Ireland. Dublin: Men's Health Forum in Ireland.

OECD (2017a). PISA 2015 results (Volume III): students' well-being. Paris: OECD Publishing.

OECD (2017b). Gender budgeting in OECD countries. Paris: OECD Publishing.

OECD (2018). Time spent in paid and unpaid work, by sex [online database]. Paris: OECD Publishing (https://stats.oecd.org/index. aspx?queryid=54757).

Olai L, Borgquist L, Svärdsudd K (2015). Life situations and the care burden for stroke patients and their informal caregivers in a prospective cohort study. Ups J Med Sci. 120(4):290–8.

Oliffe JL, Phillips MJ (2008). Men, depression and masculinities: a review and recommendations. J Mens Health 5(3):194-202.

Oliffe JL, Kelly MT, Johnson JL, Bottorff JL, Gray RE, Ogrodniczuk JS et al. (2010). Masculinities and college men's depression: recursive relationships. Health Sociol Rev. 19(4):465–77.

Oliffe JL, Ogrodniczuk JS, Bottorff JL, Johnson JL, Hoyak K (2012). "You feel like you can't live anymore": suicide from the perspectives of Canadian men who experience depression. Soc Sci Med. 74(4):506–14.

Onrust SA, Cuijpers P (2006). Mood and anxiety disorders in widowhood: a systematic review. Aging Ment Health 10:327–34.

Pachankis JE, Bränström R (2018). Hidden from happiness: structural stigma, sexual orientation concealment, and life satisfaction across 28 countries. J Consult Clin Psychol. 86(5):403–15.

Palloni A (2011). Living arrangements of older persons. In: United Nations Population Division Department of Economic and Social Affairs. Living arrangements of older persons: critical issues and policy responses. Population Bulletin of the United Nations, Special Issue Nos. 42/43. New York (NY): United Nations:54–110.

Palmieri L, Bennett K, Giampaoli S, Capewell S (2010). Explaining the decrease in coronary heart disease mortality in Italy between 1980 and 2000. Am J Public Health 100(4):684–92.

Patzelt C, Heim S, Deitermann B, Theile G, Krauth C, Hummers-Pradier E et al. (2016). Reaching the elderly: understanding of health and preventive experiences for a tailored approach – results of a qualitative study. BMC Geriatr. 16(1):210.

Pearson S (2003). Promoting sexual health services to young men: findings from focus group discussions. J Fam Plann Reprod Health Care 29(4):194–8.

Pfau-Effinger B (2004). Socio-historical paths of the male breadwinner model – an explanation of cross-national differences. Br J Sociol. 55(3):377–99.

Phillips DA (2006). Masculinity, male development, gender, and identity: modern and postmodern meanings. Issues Ment Health Nurs. 27:403–23.

Pimouguet C, Rizzuto D, Schön P, Shakersain B, Angleman S, Lagergren M et al. (2015). Impact of living alone on institutionalization and mortality: a population-based longitudinal study. Eur J Public Health 26(1):182–7.

Pine DS, Fox NA (2015). Childhood antecedents and risk for adult mental disorders. Annu Rev Psychol. 66:459–85.

Platts LG, Head J, Stenholm S, Holendro SC, Goldberg M, Zins M (2016). Physical occupational exposures and health expectancies in a French occupational cohort. Occup Environ Med. 74(3):176–83.

Power C, Graham H, Due P, Hallqvist J, Joung I, Kuh D et al. (2005). The contribution of childhood and adult socioeconomic position to adult obesity and smoking behaviour: an international comparison. Int J Epidemiol. 34(2):335–44.

Preston SH (1975). The changing relation between mortality and level of economic development. Popul Stud. 29(2):231-48.

Promundo (2018). International Men and Gender Equality Survey (IMAGES). In: Promundo [website]. Washington (DC): Promundo (https://promundoglobal.org/programs/international-men-and-gender-equality-survey-images/).

Promundo, CulturaSalud, REDMAS (2013). Program P – a manual for engaging men in fatherhood, caregiving, maternal and child health. Rio de Janeiro, Washington (DC): Promundo.

Psota M, Bandosz P, Gonçalvesová E, Avdičová M, Bucek Pšenková M, Studenčan M et al. (2018). Explaining the decline in coronary heart disease mortality rates in the Slovak Republic between 1993–2008. PLoS One 13(1):e0190090.

Public Health Agency of Sweden (2014). Utvecklingen av hälsan och hälsans bestämningsfaktorer bland homo- och bisexuella personer [The development of health and health determinants among gay and bisexual people]. Solna Municipality: Public Health Agency of Sweden (in Swedish).

Public Health Agency of Sweden (2017). Sexuality and health among young people in Sweden. UngKAB15 – a survey on knowledge, attitudes & behaviour among young people 16–29 years old. Solna Municipality: Public Health Agency of Sweden.

Ramchand R, Rudavsky R, Grant S, Tanielian T, Jaycox L (2015). Prevalence of, risk factors for, and consequences of posttraumatic stress disorder and other mental health problems in military populations deployed to Iraq and Afghanistan. Curr Psychiatry Rep. 17(5):37.

Redondo-Sendino A, Guallar-Castillón P, Banegas JR, Rodríguez-Artalejo F (2006). Gender differences in the utilization of healthcare services among the older adult population of Spain. BMC Public Health 6:155.

Ricardo C, Verani F (2010). Engaging men and boys in gender equality and health: a global toolkit for action. New York (NY): UNFPA, Promundo.

Richardson N, Carroll P (2009). Getting men's health onto a policy agenda – charting the development of a national men's health policy in Ireland. J Mens Health 6(2):105–13.

Richardson N, Carroll P (2017). Making men visible in health policy: lessons learned from Ireland's national men's health policy. Eur J Public Health 27:Issue suppl.3: ckx186.140, https://doi.org/10.1093/eurpub/ckx186.140.

Richardson N, Smith J (2011). National men's health policies in Ireland and Australia: what are the challenges associated with transitioning from development to implementation? Public Health 125(7):424–32.

Robertson S (2007). Understanding men and health: masculinities, identity and well-being. London: Open University Press.

Robertson LM, Douglas F, Ludbrook A, Reid G, van Teijlingen E (2008). What works with men? A systematic review of health promoting interventions targeting men. BMC Health Serv Res. 8:141.

Robertson S, Williamson P (2005). Men and health promotion in the UK: ten years further on? Health Educational Journal 64:293–301.

Rodrigues R, Huber M, Lamura G (2012). Facts and figures on healthy ageing and long-term care – Europe and North America. Vienna: European Centre for Social Welfare Policy and Research.

Romo-Avilés N, Marcos-Marcos J, Tarragona-Camacho A, Marquina-Márquez A, Gil-Garcia E (2016). "I like to be different from how I normally am": heavy alcohol consumption among female Spanish adolescents and the unsettling of traditional gender norms. Drug–Educ Prev Polic. 25(3):262–72.

Ross CE, Masters RK, Hummer RA (2012). Education and the gender gaps in health and mortality. Demography 49:1157–83.

Rovito MJ, Leonard B, Llamas R, Leone JE, Talton W, Fadich A et al. (2017). A call for gender-inclusive global health strategies. Am J Mens Health 11(6):1804–8.

Rutter M, Kim-Cohen J, Maughan B (2006). Continuities and discontinuities in psychopathology between childhood and adult life. J Child Psychol Psychiatry 47:276–95.

Ryser VA, Wernli B (2017). How does transitioning into retirement impact the individual emotional system? Evidence from the Swiss context. Advances in Life Course Research 32:42–54.

Saewyc EM (2011). Research on adolescent sexual orientation: development, health disparities, stigma, and resilience. J Res Adolesc. 21(1):256–72.

Şahan C, Demiral Y, Kılıç B, Aslan O (2016). Changes in employment status after myocardial infarction among men. Balkan Med J. 33(4):419–25.

Samele C, Urquía N, Slade K, Forrester A (2017). Information pathways into prison mental health care. J Forensic Psychiatry Psychol. 28:548–61.

Samkange-Zeeb FN, Spallek L, Zeeb H (2011). Awareness and knowledge of sexually transmitted diseases (STDs) among schoolgoing adolescents in Europe: a systematic review of published literature. BMC Public Health 11(1):727.

Sánchez Recio R, Alonso Pérez de Ágreda JP, Santabárbara Serrano J (2016). Infecciones de transmisión sexual en hombres internos en prisión: riesgo de desarrollo de nuevas infecciones [Sexually transmitted infections in prison inmates: risk of developing new infections]. Gac Sanit. 30:208–14 (in Spanish).

Sandfort TGM, Bakker F, Schellevis FG, Vanwesenbeeck I (2006). Sexual orientation and mental and physical health status: findings from a Dutch population survey. Am J Public Health 96(6):1119–25.

Sari N, Langenbrunner J (2001). Consumer out-of-pocket spending for pharmaceuticals in Kazakhstan: implications for sectoral reform. Health Policy Plan. 16:428–34.

Sarma S, Hawley G, Basu K (2009). Transitions in living arrangements of Canadian seniors: findings from the NPHS longitudinal data. Soc Sci Med. 68(6):1106–13.

Sasson I (2016). Trends in life expectancy and lifespan variation by educational attainment: United States, 1990–2010. Demography 53:269–93.

Scarborough P, Harrington RA, Mizdrak A, Zhou LM, Doherty A (2014). The Preventable Risk Integrated ModEl and its use to estimate the health impact of public health policy scenarios. Scientifica (Cairo) 748750. doi:10.1155/2014/748750.

Schaan B (2013). Widowhood and depression among older Europeans – the role of gender, caregiving, marital quality, and regional context. J Gerontol B Psychol Sci Soc Sci. 68(3):431–42.

Schulz R, Beach S, Lind B, Martire L, Zdaniuk B, Hirsch C et al. (2001). Involvement in caregiving and adjustment to death of a spouse: findings from the caregiver health effects study. JAMA 285:3123–9.

Schwartz H, Litwin E (2018). Social network changes among older Europeans: the role of gender. Eur J Ageing doi.org/10.1007/ s10433-017-0454-z.

Sen G, Östlin P, George A (2007). Unequal, unfair, ineffective and inefficient. Gender inequality in health: why is exists and how we can change it. Final report to the WHO Commission on Social Determinants of Health. Women and Gender Equity Knowledge Network. Geneva: World Health Organization (http://www.who.int/social\_determinants/publications/womenandgender/en/).

Sharma R, Harlev A, Agarwal A, Esteves SC (2016). Cigarette smoking and semen quality: a new meta-analysis examining the effect of the 2010 World Health Organization laboratory methods for the examination of human semen. Eur Urol. 70:635–45.

Siegrist J, Wahrendorf M, editors (2016). Work stress and health in a globalized economy. The model of effort-reward imbalance. Cham: Springer International Publishing Switzerland.

Skulason B, Jonsdottir LS, Sigurdardottir V, Helgason AR (2012). Assessing survival in widowers, and controls – a nationwide, sixto nine-year follow-up. BMC Public Health 12:96.

Slebus FG, Kuijer PPFM, Willems JHBM, Sluiter JK, Frings-Dresen MHW (2007). Prognostic factors for work ability in sicklisted employees with chronic diseases. Occup Environ Med. 64:814–9.

Spratt J, Shucksmith J, Philip K, Watson C (2010). "The bad people go and speak to her": young people's choice and agency when accessing mental health support in school. Children & Society 24:483–94.

Staubli S, Zweimüller J (2013). Does raising the early retirement age increase employment of older workers? J Public Econ. 108:17–32.

Stewart B, Wild C, editors (2014). World cancer report 2014. Lyon: International Agency for Research on Cancer.

Strandh M, Hammarström A, Nilsson K, Nordenmark M, Russel H (2013). Unemployment, gender and mental health: the role of the gender regime. Sociol Health IIIn. 35:649–65.

Sundstrom G, Fransson E, Malmberg B, Davey A (2009). Loneliness among older Europeans. Eur J Ageing 6:267.

Survey of Health, Ageing and Retirement in Europe (2018). SHARE: Survey of Health, Ageing and Retirement in Europe [website]. Munich: Centre for the Economics of Aging (http://www.share-project.org/).

Swedish Association of Local Authorities and Regions (2016). More men in preschool – an anthology on broader recruitment. Stockholm: Swedish Association of Local Authorities and Regions.

Swedish Ministry of Health and Social Affairs (2014). Män och jämställdhet [Men and gender equality]. Stockholm: Swedish Ministry of Health and Social Affairs (Public Inquiry SOU 2014:6) (in Swedish).

Taylor PJ, Kolt GS, Vandelanotte C, Caperchione CM, Mummery WK, George ES et al. (2013). A review of the nature and effectiveness of nutrition interventions in adult males – a guide for intervention strategies. Int J Behav Nutr Phys Act. 10:13.

Thébaud S (2010). Masculinity, bargaining, and breadwinning: understanding men's housework in the cultural context of paid work. Gender & Society 24:330–54.

Tomassini C, Glaser K, Wolf D, van Groenou M, Grundy E (2004). Living arrangements among older people: an overview of trends in Europe and the USA. Popul Trends 115:2–12.

TorsheimT, Ravens-Sieberer U, Hetland J, Välimaa R, Danielson M, Overpeck M (2006). Cross-national variation in gender differences in adolescent subjective health in Europe and North America. Soc Sci Med. 62:815–27.

Tosi M, Grundy E (2018). Intergenerational contacts and depressive symptoms among older parents in Eastern Europe. Aging Ment Health 12:1–7.

Tschann JM, Adler NE, Millstein SG, Gurvey JE, Ellen JM (2002). Relative power between sexual partners and condom use among adolescents. J Adolesc Health 31(1):17–25.

Uludağ A, Cevizci S, Tekin M, Haydar Ertekin Y, Sevim S, Babaoğlu Ü et al. (2015). The effect of working conditions to the health status in taxi and bus drivers in Canakkale, Turkey; community based study. J Clin Anal Med. 6(Suppl. 6):835–8.

UN Women (2015). A framework to underpin action to prevent violence against women. New York (NY): UN Women.

Unal B, Critchley JA, Capewell S (2005). Modelling the decline in coronary heart disease deaths in England and Wales, 1981–2000: comparing contributions from primary prevention and secondary prevention. Br Med J. 331(7517):614.

Unal B, Sözmen K, Arık H, Gerçeklioğlu G, Altun DU, Şimşek H et al. (2013). Explaining the decline in coronary heart disease mortality in Turkey between 1995 and 2008. BMC Public Health 13:1135.

United Nations (1990). Convention on the Elimination of All Forms of Discrimination against Women. Adopted by the General Assembly of the United Nations on 18 December 1979. In: Treaty series. Treaties and international agreements registered or filed and recorded with the Secretariat of the United Nations. Volume 1249. New York (NY): United Nations:13–23.

United Nations (2009). Fact sheet. International human rights law and sexual orientation and gender identity. New York (NY): United Nations.

United Nations (2015a) Joint UN statement on ending violence and discrimination against lesbian, gay, bisexual, transgender and intersex people. New York (NY): United Nations.

United Nations (2015b). Sustainable Development Goals. 17 goals to sustain our world [website]. New York (NY): United Nations (https://www.un.org/sustainabledevelopment/sustainable-development-goals/).

United Nations Children's Fund (2017) State of the world's children statistical tables 2017: reference guide. New York (NY): United Nations Children's Fund.

United Nations Committee on the Rights of the Child (2012). 2012 day of general discussion. The rights of all children in the context of migration. Background paper. New York (NY): United Nations.

United Nations Department of Economic and Social Affairs, Population Division (UNDESA) (2005). Living arrangements of older persons around the world. New York (NY): UNDESA (ST/ESA/SER.A/240).

United Nations Department of Economic and Social Affairs, Population Division (UNDESA) (2017a). Living arrangements of older persons around the world: a report on an expanded international dataset. New York (NY): UNDESA (ST/ESA/SER.A/407).

United Nations Department of Economic and Social Affairs, Population Division (UNDESA) (2017b). Household size and composition around the world 2017 – data booklet. New York (NY): UNDESA (ST/ESA/ ER.A/405).

United Nations Department of Economic and Social Affairs, Population Division (UNDESA) (2018). World contraceptive use 2018. In: United Nations Department of Economic and Social Affairs, Population Division [website] New York (NY): UNDESA (http:// www.un.org/en/development/desa/population/publications/dataset/contraception/wcu2018.shtml). United Nations Economic and Social Council (2013). Gender statistics. Report of the Secretary–General. New York (NY): United Nations (E/CN.3/2013/10).

United Nations Educational, Scientific and Cultural Organization (UNESCO) (2018a). Welcome to UIS.Stat [online database]. Paris: UNESCO (http://data.uis.unesco.org/).

United Nations Educational, Scientific and Cultural Organization (UNESCO) (2018b). International technical guidance on sexuality education: an evidence-informed approach. Revised edition. Paris: UNESCO.

United Nations Europe and Central Asia Issue-Based Coalition on Gender (2017). SDGs and gender equality: UN interagency guidance note for the Europe and Central Asia Region. New York (NY): United Nations Development Group.

United Nations High Commissioner for Refugees (2012). Working with men and boy survivors of sexual and gender-based violence in forced displacement. Geneva: United Nations High Commissioner for Refugees.

United Nations Human Rights Council (2011). Discriminatory laws and practices and acts of violence against individuals based on their sexual orientation and gender identity. Report of the United Nations High Commissioner for Human Rights. Geneva: United Nations Human Rights Council (A/HRC/19/41).

United Nations Office on Drugs and Crime (2016). Global report on trafficking in persons in 2016. New York (NY): United Nations Office on Drugs and Crime.

United Nations Population Fund (UNFPA) (2013). Engaging men and boys: a brief summary of UNFPA experience and lessons learned. New York (NY): UNFPA.

United Nations Population Fund (UNFPA), Promundo (2010). Engaging men and boys in gender equality and health. A global toolkit for action. New York (NY): UNFPA.

United Nations Population Fund (UNFPA), Promundo (2018). Engaging men in unpaid care work. An advocacy brief for eastern Europe and Central Asia. New York (NY): UNFPA.

United Nations Statistics Division (2018). SDG indictors. In: United Nations Statistics Division [online database]. New York (NY): United Nations Statistics Division (https://unstats.un.org/sdgs/indicators/database/?indicator=5.4.1).

van den Bogaard L, Henkens K, Kalmijn M (2014). Pasts that last: the moderating role of education and former occupation for men's volunteering after retirement. Res Soc Stratif Mobil. 36:87–100.

van der Star A, Bränström R (2015). Acceptance of sexual minorities, discrimination, social capital, health and well-being. BMC Public Health 15(1):812.

Vartiainen E, Jousilahti P, Alfthan G, Sundvall J, Pietinen P, Puska P (2000). Cardiovascular risk factor changes in Finland, 1972–1997. Int J Epidemiol. 29(1):49–56.

Verbakel E, Tamlagsronning S, Winstone L, Fjaer EL, Eikemo TA (2017). Informal care in Europe: findings from the European Social Survey (2014) special module on the social determinants of health. Eur J Public Health 27:90–5.

VicHealth (2017). Young men urged to stop stalling and quit [partner release]. In: VicHealth [website]. Carlton (VIC): VicHealth (https://www.vichealth.vic.gov.au/media-and-resources/media-releases/young-men-urged-to-stop-stalling-and-quit).

Viner RM, Ozer E, Denny S, Marmot M, Resnick M, Fatusi A et al. (2012). Adolescence and the social determinants of health. Lancet 379:1641–52.

Wang M (2007). Profiling retirees in the retirement transition and adjustment process: examining the longitudinal change patterns of retirees' psychological well-being. J Appl Psychol. 92(2):455–74.

Wang Y, Freemantle N, Nazareth I, Hunt K (2014). Gender differences in survival and the use of primary care prior to diagnosis of three cancers: an analysis of routinely collected UK general practice data. PLoS One 9(7):e101562.

Warren T (2007). Conceptualizing breadwinning work. Work Employ Soc. 21:317-336.

Wershler JL, Ronis ST (2015). Psychosocial characteristics and service needs of Canadian suburban male youth at risk for homelessness. Child Youth Serv Rev. 55:29–36.

Wesselhoeft R, Pedersen CB, Mortensen PB, Mors O (2015). Gender–age interaction in incidence rates of childhood emotional disorders. Psychol Med. 45(4):829–39.

White A, McKee M, Richardson N, de Visser RO, Madsen SA, de Sousa B et al. (2011). Europe's men need their own health strategy. Br Med J. 343:d7397.

White A, Seims A, Cameron I, Taylor T (2018). Social determinants of male health: a case study of Leeds, UK. BMC Public Health 18:160.

WHO (2004). Global strategy on diet, physical activity and health. Geneva: World Health Organization (http://www.who.int/ dietphysicalactivity/strategy/eb11344/strategy\_english\_web.pdf).

WHO (2010a). Gender, health, tobacco and equity. Geneva: World Health Organization (http://www.who.int/tobacco/publications/gender/gender\_tobacco\_2010.pdf?ua=1).

WHO (2010b). Global recommendations on physical activity for health. Geneva: World Health Organization (http://www.who. int/dietphysicalactivity/publications/9789241599979/en/).

WHO (2010c). Policy approaches to engaging men and boys in achieving gender equality and health equity. Geneva: World Health Organization (http://www.who.int/gender-equity-rights/knowledge/9789241500128/en/).

WHO (2010d) Country profiles: resources for the prevention and treatment of substance use disorders. In: World Health Organization [website]. Geneva: World Health Organization (http://www.who.int/substance\_abuse/publications/atlas\_report/ profiles/en/).

WHO (2010e). Violence prevention. The evidence. Series of briefings on violence prevention. Geneva: World Health Organization (http://apps.who.int/iris/bitstream/handle/10665/77936/9789241500845\_eng.pdf?sequence=1).

WHO (2011). Gender mainstreaming for health managers: a practical approach. Geneva: World Health Organization (http://www.who.int/gender-equity-rights/knowledge/health\_managers\_guide/en).

WHO (2013a). Package of Essential Noncommunicable (PEN) disease interventions for primary health care in low-resource settings. Geneva: World Health Organization (http://www.who.int/nmh/publications/essential\_ncd\_interventions\_lr\_settings.pdf).

WHO (2014a). The second global status report on non-communicable diseases. Geneva: World Health Organization (http://apps. who.int/iris/bitstream/handle/10665/148114/9789241564854\_eng.pdf?sequence=1).

WHO (2014b). Preventing suicide; a global imperative. Geneva: World Health Organization (http://www.who.int/mental\_health/ suicide-prevention/world\_report\_2014/en/).

WHO (2014c). Global status report on alcohol and health 2014. Geneva: World Health Organization (http://www.who.int/substance\_abuse/publications/global\_alcohol\_report/en/).

WHO (2014d). Health of the world's adolescents: a second chance in the second decade. Geneva: World Health Organization (http://www.who.int/maternal\_child\_adolescent/documents/second-decade/en/).

WHO (2014e). Global status report on violence prevention 2014. Geneva: World Health Organization (http://www.who.int/violence\_injury\_prevention/violence/status\_report/2014/en/).

WHO (2016a). Global health estimates 2015: deaths by cause, age, sex, by country and by region 2000–2015 [online database]. Geneva: World Health Organization (http://www.who.int/healthinfo/global\_burden\_disease/estimates/en).

WHO (2016b). The health and social effects of nonmedical cannabis use. Geneva: World Health Organization (http://www.who. int/substance\_abuse/publications/cannabis/en/).

WHO (2016c). FAQ on health and sexual diversity. An introduction to key concepts. Geneva: World Health Organization (http://www.who.int/gender-equity-rights/news/sexual-gender-diversity-faq.pdf).

WHO (2017a). Road traffic injuries. Key facts. In: World Health Organization [website]. Geneva: World Health Organization (http://www.who.int/mediacentre/factsheets/fs358/en/).

WHO (2017b). Tobacco. Key facts. In: World Health Organization [website]. Geneva: World Health Organization (http://www.who. int/mediacentre/factsheets/fs339/en/).

WHO (2017c). Tobacco-free initiative (TFI). Global data. In: World Health Organization [website]. Geneva: World Health Organization (http://www.who.int/tobacco/global\_data/en/).

WHO (2017d). Physical activity. Key facts. In: World Health Organization [website]. Geneva: World Health Organization (http://www.who.int/mediacentre/factsheets/fs385/en/).

WHO (2017e). Global Health Observatory data repository. Obesity (body mass index  $\geq$  30), age-standardized (%). Estimates by country 2017 [online database]. Geneva: World Health Organization (http://apps.who.int/gho/data/node.main.A900A?lang=en).

WHO (2017f). Global Health Observatory data repository. Mean systolic blood pressure trends, age-standardized (mmHg). Estimates by country [online database]. Geneva: World Health Organization (http://apps.who.int/gho/data/view. main.12467EST?lang=en).

WHO (2017g). Disease burden and mortality estimates. Disease burden, 2000–2016 [online database]. Geneva: World Health Organization (http://www.who.int/healthinfo/global\_burden\_disease/estimates/en/index1.html).

WHO (2018a). Global Health Observatory data repository. Life expectancy and healthy life expectancy [online database]. Geneva: World Health Organization (http://apps.who.int/gho/data/node.main.688).

WHO (2018b). Health statistics and information systems. Disease burden and mortality estimates. Cause-specific mortality, 2000–2016 [online database]. Geneva: World Health Organization (http://www.who.int/healthinfo/global\_burden\_disease/ estimates/en/).

WHO (2018c). World Health Statistics data visualizations dashboard [online database]. Geneva: World Health Organization (http://apps.who.int/gho/data/view.sdg.3-a-data-ctry?lang=en).

WHO (2018d). Global information system on alcohol and health (GISAH). In: World Health Organization [website]. Geneva: World Health Organization (http://www.who.int/gho/alcohol/en/).

WHO (2018e). Global Health Observatory data repository [online database]. Geneva: World Health Organization (http://apps. who.int/gho/data/node.home).

WHO, Department of Reproductive Health and Research, London School of Hygiene and Tropical Medicine, South African Medical Research Council (2013). Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence. Geneva: World Health Organization (http://www.who.int/reproductivehealth/publications/violence/9789241564625/en/).

WHO, International Society of Hypertension (2007). Cardiovascular risk prediction cards. In: World Health Organization [website]. Geneva: World Health Organization (http://www.who.int/cardiovascular\_diseases/publications/Chart\_predictions/en/).

WHO Regional Office for Europe (2007). Health in prisons: a WHO guide to the essentials in prison health. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/publications/abstracts/health-in-prisons.-a-who-guide-to-the-essentials-in-prison-health).

WHO Regional Office for Europe (2013a). Regional Committee for Europe resolution EUR/RC63/R10 on the European mental health action plan. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/\_\_data/assets/pdf\_file/0009/217764/63rs10e\_MentalHe alth.pdf?ua=1).

WHO Regional Office for Europe (2013b). Good governance for prison health in the 21st century. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/publications/abstracts/good-governance-for-prison-health-in-the-21st-century.-a-policy-brief-on-the-organization-of-prison-health-2013).

WHO Regional Office for Europe (2014a). Prevention and control of noncommunicable diseases in the European Region: a progress report. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/health-topics/noncommunicable-diseases/ncd-background-information/prevention-and-control-of-noncommunicable-diseases-in-the-european-region-a-progress-report).

WHO Regional Office for Europe (2014b). Review of social determinants and the health divide in the WHO European Region: final report. Updated reprint 2014. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/publications/ abstracts/review-of-social-determinants-and-the-health-divide-in-the-who-european-region.-final-report).

WHO Regional Office for Europe (2015a). The European health report 2015. Targets and beyond: reaching new frontiers of evidence. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/publications/abstracts/european-health-report-2015-the.-targets-and-beyond-reaching-new-frontiers-in-evidence).

WHO Regional Office for Europe (2015b). Roadmap of actions to strengthen implementation of the WHO Framework Convention on Tobacco Control in the European Region 2015–2025. Copenhagen: WHO Regional Office for Europe (EUR/RC65/10; http://www.euro.who.int/en/about-us/governance/regional-committee-for-europe/past-sessions/65th-session/documentation/working-documents/eurrc6510-roadmap-of-actions-to-strengthen-implementation-of-the-who-framework-convention-on-tobacco-control-in-the-european-region-20152025).

WHO Regional Office for Europe (2015c). The Minsk Declaration: the life-course approach in the context of Health 2020. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/publications/policy-documents/the-minsk-declaration).

WHO Regional Office for Europe (2015d). Health 2020: education and health through the life-course. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/health-topics/health-policy/health-2020-the-european-policy-for-health-and-well-being/implementation-package/1.-introducing-health-2020-to-different-stakeholders-across-sectors/sector-briefs-intersectoral-action-for-better-health-and-well-being/health-2020-education-and-health-through-the-life-course).

WHO Regional Office for Europe (2015e). Priorities for health systems strengthening in the WHO European Region 2015–2020: walking the talk on people-centredness. Copenhagen: WHO Regional Office for Europe (EUR/RC65/13; http://www.euro.who. int/en/about-us/governance/regional-committee-for-europe/past-sessions/65th-session/documentation/working-documents/ eurrc6513-priorities-for-health-systems-strengthening-in-the-who-european-region-20152020-walking-the-talk-on-people-centredness).

WHO Regional Office for Europe (2016a). Action plan for the prevention and control of noncommunicable disease in the WHO European Region. Copenhagen: WHO Regional Office for Europe (EUR/RC66/11 (http://www.euro.who.int/en/about-us/governance/regional-committee-for-europe/past-sessions/66th-session/documentation/working-documents/eurrc6611-action-plan-for-the-prevention-and-control-of-noncommunicable-diseases-in-the-who-european-region).

WHO Regional Office for Europe (2016b). Sexually transmitted infections. In: WHO Regional Office for Europe [website]. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/health-topics/communicable-diseases/sexually-transmitted-infections).

WHO Regional Office for Europe (2016c) Refugee crisis. Situation update 3. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/\_\_data/assets/pdf\_file/0016/305503/Refugee-Crisis-situation-update-report-n3.pdf).

WHO Regional Office for Europe (2016d). Women's health and well-being in the WHO European Region: beyond the mortality advantage. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/health-topics/health-determinants/ gender/publications/2016/womens-health-and-well-being-in-europe-beyond-the-mortality-advantage-2016).

WHO Regional Office for Europe (2016e). Strengthening people-centred health systems in the WHO European Region: framework for action on integrated health services delivery. Copenhagen: WHO Regional Office for Europe (EUR/RC66/15 + EUR/RC66/Conf. Doc./11; http://www.euro.who.int/\_\_data/assets/pdf\_file/0004/315787/66wd15e\_FFA\_IHSD\_160535.pdf?ua=1).

WHO Regional Office for Europe (2016f). Action plan for sexual and reproductive health: towards achieving the 2030 Agenda for Sustainable Development in Europe – leaving no one behind. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/health-topics/Life-stages/sexual-and-reproductive-health/publications/2016/action-plan-for-sexual-and-reproductive-health-towards-achieving-the-2030-agenda-for-sustainable-development-in-europe-leaving-no-one-behind-2016).

WHO Regional Office for Europe (2016g). Strategy on women's health and well-being in the WHO European Region. Copenhagen: WHO Regional Office for Europe (EUR/RC66/14; http://www.euro.who.int/en/about-us/governance/regionalcommittee-for-europe/past-sessions/66th-session/documentation/working-documents/eurrc6614-strategy-on-womens-healthand-well-being-in-the-who-european-region).

WHO Regional Office for Europe (2017). The WHO Global Monitoring Framework on noncommunicable diseases. Progress towards achieving the targets for the WHO European Region. Background paper for the WHO European Meeting of National NCD Directors and Programme Managers, Moscow, Russian Federation, 8–9 June 2017. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/\_\_data/assets/pdf\_file/0003/340869/Report-3.pdf?ua=1).

WHO Regional Office for Europe (2018a). European Health for All database (HFA-DB) [online database]. Copenhagen: WHO Regional Office for Europe (https://gateway.euro.who.int/en/datasets/european-health-for-all-database/).

WHO Regional Office for Europe (2018b). Hepatitis. In: WHO Regional Office for Europe [website]. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/health-topics/communicable-diseases/hepatitis).

WHO Regional Office for Europe (2018c). WHO European Childhood Obesity Surveillance Initiative (COSI). In: WHO Regional Office for Europe [website]. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/health-topics/disease-prevention/nutrition/activities/who-european-childhood-obesity-surveillance-initiative-cosi).

WHO Regional Office for Europe (2018d). European Health Information Gateway. Probability of dying before age 5 per 1000 live births [online database]. Copenhagen: WHO Regional Office for Europe (https://gateway.euro.who.int/en/indicators/hfa\_61-1070-probability-of-dying-before-age-5-per-1000-live-births/).

WHO Regional Office for Europe (2018e). European Health Information Gateway | Health for All explorer [online database]. Copenhagen: WHO Regional Office for Europe (https://gateway.euro.who.int/en/hfa-explorer/).

WHO Regional Office for Europe (2018f): Country assessments. In: WHO Regional Office for Europe [website]. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/media-centre/events/events/2018/04/high-level-regional-meeting-health-systems-respond-to-ncds-experience-in-the-european-region/documentation/background-documents/country-assessments).

WHO Regional Office for Europe (2018g). High-level regional meeting. Health systems respond to NCDs: experience in the European Region. Sitges, Spain, 16–18 April 2018. Outcome statement. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/\_\_data/assets/pdf\_file/0020/370325/outcome-statement-sitges-eng.pdf?ua=1).

WHO Regional Office for Europe (2018h). 10 facts on healthy ageing in Europe. In: WHO Regional Office for Europe [website]. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/health-topics/Life-stages/healthy-ageing/data-and-statistics/10-facts-on-healthy-ageing-in-europe).

WHO Regional Office for Europe (2018i): Healthy ageing. In: WHO Regional Office for Europe [website]. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/health-topics/Life-stages/healthy-ageing).

Wijeysundera HC, Machado M, Farahati F, Wang X, Witteman W, van der Velde G et al. (2010). Association of temporal trends in risk factors and treatment uptake with coronary heart disease mortality, 1994–2005. JAMA 303(18):1841–7.

Wijnhoven TMA, van Raaij JMA, Spinelli A, Starc G, Hassapidou M, Spiroski I et al. (2014). WHO European Childhood Obesity Surveillance Initiative: body mass index and level of overweight among 6–9-year-old children from school year 2007/2008 to school year 2009/2010. BMC Public Health 14:806.

Wilkins D, Payne S, Granville G, Branney P (2008). The Gender and Access to Health Services Study. Final report. London: Department of Health.

Williams D (2003). The health of men: structured inequalities and opportunities. Am J Public Health 93(5):724–31.

Williams DR (2015). Preface: minority men's health. Ethn Dis. 25(3):237-9.

Wilkinson R, Marmot M (2003). Social determinants of health. The solid facts. Second edition. Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/en/publications/abstracts/social-determinants-of-health.-the-solid-facts).

Workowski KA, Bolan GA, Centers for Disease Control and Prevention (2015). Sexually transmitted diseases treatment guidelines, 2015. MMWR Recomm Rep. 64(33):924.

World Bank (2012). World development report 2012. Gender equality and development. Washington (DC): World Bank.

World Bank (2017a). Global health data exchange [online database]. Washington (DC): World Bank (https://data.worldbank.org/topic/health).

World Bank (2017b). Share of youth not in education, employment or training male (% of male youth population). International Labour Organization, ILOSTAT database [online database]. Washington (DC): World Bank (https://data.worldbank.org/indicator/SL.UEM.NEET.MA.ZS).

World Bank (2017c). Share of youth not in education, employment or training female (% of female youth population). International Labour Organization, ILOSTAT database [online database]. Washington (DC): World Bank (https://data.worldbank. org/indicator/SL.UEM.NEET.FE.ZS).

World Economic Forum (2017). The global gender gap report 2017. Geneva: World Economic Forum.

World Policy Analysis Center (2018). Is paid leave structured to incentivize working fathers to share infant caregiving responsibilities? In: World Policy Analysis Center [website]. Los Angeles (CA): World Policy Analysis Center (https://www.worldpolicycenter.org/policies/is-paid-leave-structured-to-incentivize-working-fathers-to-share-infant-caregiving-responsibilities).

World Prison Brief (undated). Highest to lowest – prison population total [online database]. London: Birkbeck College, University of London (http://www.prisonstudies.org/highest-to-lowest/prison-population-total?field\_region\_taxonomy\_tid=14).

Yousaf O, Grunfeld EA, Hunter MS (2015). A systematic review of the factors associated with delays in medical and psychological help-seeking among men. Health Psychol Rev. 9(2):264–76.

Zahn-Waxler C, Shirtcliff EA, Marceau K (2008). Disorders of childhood and adolescence: gender and psychopathology. Annu Rev Clin Psychol. 4:275–303.

Zhou B, Bentham J, Di Cesare M, Bixby H, Danaei G, Cowan MJ et al. (2017). Worldwide trends in blood pressure from 1975 to 2015: a pooled analysis of 1479 population-based measurement studies with 19.2 million participants. Lancet 389(10064):37–55.

Zielinski A, Hakansson A, Jurgutis A, Ovhed I, Halling A (2008). Differences in referral rates to specialized health care from four primary health care models in Klaipeda, Lithuania. BMC Fam Pract. 9:63. doi:10.1186/1471-2296-9-63.

Zimmerman C, Kiss L (2017). Human trafficking and exploitation: a global health concern. PLoS Med. 14: e1002437.

#### The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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## The health and well-being of men in the WHO European Region: better health through a gender approach

Although declining, high levels of premature mortality among men in some countries of the WHO European Region and gaps between men within countries require specific attention. A growing evidence base on the effectiveness of genderresponsive approaches to men's health, and on the positive health impact gender equality policy has on men, need to be considered in relation to improving the health of men and women. Building on the guiding principles of the 2030 Agenda and Health 2020, and the interconnected nature of Sustainable Development Goals 3, 5 and 10, a strategy on the health and well-being of men in the WHO European Region will be considered by the 68th session of the WHO Regional Committee for Europe in September 2018. This report provides a background to the strategy and presents a snapshot of the evidence of the health issues men face and the underlying social determinants of health. It presents a special focus on the impact of gender norms and stereotypes on health while also looking at gender-responsive health system approaches for men's health, and the health impacts of gender equality policy and engagement of men in achieving gender equality goals.

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