The report on the ‘Health Situation of Women in Germany’ provides information about many important aspects of women’s health, describes the current situation based on concrete figures and highlights important developments. This conclusion focuses on four major topics under which numerous results within the report can be summarised. The first of these topics is demographic change where the observed rise in life expectancy is accompanied by an increase in chronic disease. The second part of the conclusion proceeds to look at ‘differences between’: the focus is on selected diseases, aspects of health behaviour and health care needs where differences can be observed between women and men. Here, differences in sex (referring to the biological aspects of an individual) and gender (referring to social constructions) are considered. The third part addresses women’s different life situations. The impact of social situation, family situation, employment and migration history on health is well documented. This section is therefore devoted to ‘differences within’ i.e. social differences and different health opportunities within the group of women. Many sections in the report highlight potential for improving women’s health. Research and data collection are areas which can contribute to further progress in women’s health. The final section of the conclusion explores data gaps and research topics needing to be put on the agenda and the potential for the topic of gender and health within health reporting.

During the final stages of the report, the novel coronavirus SARS-CoV-2 was spreading at enormous speed throughout the world. The COVID-19 pandemic has been posing immense challenges for the health of the population and society as a whole since the beginning of 2020 also in Germany. International findings point to sex and gender as possible differentiating factors for corona infections and COVID-19 mortality, the extent and causes of which will need to be investigated in more detail. In those countries where disaggregated data are available for women and men, men more often die from COVID-19 and develop more severe symptoms [1].

As regards the psychological and social implications of the pandemic, initial study results indicate that women are particularly affected [2]. They are more often employed in systemically relevant professions such as in nursing or as sales assistants in food retail. Depending on the type of activity, this may also go along with an increased risk of infection [3–5]. Initial results of studies on the impact of the pandemic on the labour market (i.e. unemployment) for women and men are now available [6, 7]. A final assessment of gender-related effects on the labour market will probably only be possible retrospectively. As women perform a large part of the care work in families, they face particular pressures in times of closed care facilities and home schooling. Initial survey results show that fathers have taken on a greater share of family work during the corona crisis [8], but also that the additional care work the pandemic has made necessary has often been apportioned to women [9]. This aspect, too, requires further analyses. Single parents have perceived the situation as particularly stressful [8, 9]; and around 88% of all single parents in Germany are women.

Also, there is concern that economic worries, quarantine and restrictions on freedom of movement could lead to a spike in domestic violence against women [10]. Research projects on gender-related effects of the COVID-19 pandemic in Germany started in spring 2020; they could only be included in this report selectively.

Demographic change and its consequences

Baby girls born in Germany have never before had the chance of living an average of around 83 years. According to estimates by the Federal Statistical Office, around one fifth of the girls born today will live to the age of 100. On average, women aged 65 today can expect to live another 21 years. The years women have gained through the increase in life expectancy can often be spent in good health, or at least not completely in disease. Life expectancy in Germany corresponds to the EU average. From a global perspective, the privileged health situation of women in Western Europe is clear – life expectancy for new-born girls is 74 years on average worldwide [11].
In Germany and many other countries, the decline in infant and child mortality and the successes in combating infectious diseases, e.g. tuberculosis, provided the basis for the continuous increase in women’s life expectancy. A further significant factor was the decline in maternal mortality, which began during the first half of the 20th century. In recent decades, the increase has been mainly due to a decrease in mortality from chronic diseases. This also means that many people now live with chronic diseases for a long time. For example, one in two women aged 65 years and older is affected by osteoarthritis, and about one in six has diabetes mellitus. The extent to which chronic diseases impact quality of life also depends on medical care and, not least, on personal resources. When asked to assess their own health, almost half of all women aged 65 years and older assess their own health as being good or very good. And over time, there is a trend towards better subjective health.

Cardiovascular diseases, still the number one cause of death for women in Germany, have been declining over recent decades. This applies as much to incidence as to mortality rates. The decrease is linked to several factors, primarily to changes in health behaviour, the increasingly guideline-based treatment of hypertension and lipid metabolic disorders, and advances in health care. The women’s health movement that formed in Germany in the 1970s very successfully drew attention to the fact that ‘women’s hearts beat differently’. By emphasising this fact, the activists opened the door to gender-equitable health care and contributed to a significant reduction in the number of women receiving delayed care following a heart attack. Women and men do not show the same symptoms when they have a heart attack. The lack of awareness of this fact was a key reason why women often did not receive adequate care.

Breast cancer is usually perceived as being a very threatening disease for women. Nearly 69,000 women were diagnosed with breast cancer in 2016, and in particular due to medical and technical progress the probability of surviving after being diagnosed with the condition has increased considerably in recent years: the relative ten-year survival rate of women with breast cancer is now 82%. Screening examinations which are nationwide available have probably also contributed to this positive development. With the increase in survival rates for many cancers, living with cancer has increasingly become a focus as has treatment of late effects and long-term consequences. An important field in this regard is psycho-oncological care. In Germany’s National Cancer Plan, psycho-oncological care is found in the section ‘Improving the quality of care for people suffering from cancer’ [12].

While the years of life gained due to increasing life expectancy are mostly spent in good health, the growing number of older people also creates a higher number of people requiring long-term care. As women’s life expectancy is higher, they face a greater risk of needing long-term care in old age. Around 2.3 million women and girls in Germany currently are in need of care and receive benefits from long-term care insurance. That is two thirds of the people with recognised need for care. The majority of those who provide care are also women. This applies both to caring for relatives and to professional care. Around 9% of women in Germany provide care for a person close to them. The proportion of women in professional care – in the health and nursing professions and in geriatric care – is around 85%. When women themselves become in need of long-term care in old age, they are less likely than men to receive it in the home environment. A significant reason for this is that women are more likely to live the last years of their lives without a partner, as three-quarters of all women are younger than their partners and men’s life expectancy is lower.

Sex and gender differences in health

In addition to cardiovascular diseases and cancer, mental disorders are widespread in our society. They rarely shorten a person’s lifespan, but they impact quality of life and can lead to short-term or long-term inability to work. Many mental disorders such as depression, anxiety disorders and eating disorders affect women more frequently than men. Biological, psychological and social factors all play a role in the development of mental disorders and are discussed as reasons for sex and gender differences. However, there are also differences in approach to medical diagnosis, i.e. when presenting the same symptoms, women are more likely to be diagnosed with a mental disorder and men with a physical disorder. Increases in sick leave and
early retirement figures indicate a growing awareness and changed perception of mental disorders – an awareness which would also be desirable with regard to gender aspects.

Mental disorders readily highlight the fact that sex and gender differences in health and illness found in the available data should be considered and interpreted in a differentiated manner. This report therefore analyses both biological differences between women and men, e.g. in anatomy, physiology, genetics and hormone metabolism, as well as socio-cultural differences, e.g. regarding cultural conventions and social roles. Considering these two dimensions – biological and sociocultural – is fundamental to understanding sex and gender differences [13, 14]. Both dimensions interact, and there is great diversity within them [15–17]. In this respect, it is also worth mentioning gender medicine, which deals with the impact of sex and gender on the development, prevention, diagnosis, treatment and research of diseases. Many findings from gender medicine have been incorporated into this report.

Sex and gender differences are also evident for diabetes. Due to its wide and increasing prevalence, diabetes is highly relevant for the health of both women and men. Prevalence of diabetes is somewhat lower for women than for men, and women are less likely to be affected by late sequelae. However, women with diabetes run a significantly higher relative risk of developing coronary heart disease than men with diabetes – the cardioprotective effect associated with being female is significantly weaker. For women, gestational diabetes is another important concern and associated with an increased risk of complications in pregnancy.

Health behaviour has a major influence on the development of diabetes and many other diseases and health problems, and it also plays a key role in managing disease and sequelae. Women often show greater health-consciousness than men, for example, they tend to eat a more balanced diet and drink less alcohol. In other areas, however, the opposite applies: women are for example less likely to do sports in leisure time than men. In the case of tobacco consumption, there is a positive trend: after the smoking prevalence of women rose from the 1970s onwards, the figures evidence a declining trend since the beginning of the 21st century. Today, around 90% of young girls and slightly fewer boys between 14 and 17 years are non-smokers. Smoking is a key risk factor for numerous chronic non-communicable diseases such as cardiovascular diseases, cancer and respiratory diseases. In the long term, a drop in smoking rates will therefore leave its mark on the lung cancer incidence figures for women as well, where we are currently still seeing an increase in the number of new cases and mortality rates.

The evidence indicates that regular physical activity provides numerous benefits to physical and psychological health. Slightly fewer women than men participate in leisure time sports activities: they are less likely to do sports, especially at mid-adult age. Many women of working age see themselves in a situation of having to balance work with raising children and/or caring for relatives. Women provide a large part of the care work in families. For some, this leaves little time for sports. However, the differences observed between women and men, with women doing less exercise are only small when taking exercise and overall physical activity levels in everyday life, e.g. cycling or walking into account. The data show family situation, employment, education, financial resources and other general conditions determine the opportunities and barriers to exercise and health-conscious behaviour in general.

Significant differences between women and men are also evident in health care, for instance in the use of medicines. On the one hand, they relate to the metabolism and effect of drugs, including side effects. On the other hand, there are differences in the use of medicines: women take medicines more often than men, both on prescription and on a self-medicated basis. Germany’s action plan to improve the safety of drug therapy emphasises the need to take differences between women and men into account. Pre-clinical drug trials should be designed accordingly and women should be adequately involved in clinical trials. Gender differences in how drugs are used should be more strongly addressed in health care research. The inclusion of sex and gender specific recommendations in guidelines (drug response, adverse reactions) could also help to make drug therapies safer and more effective for women.

Declining trends have been observed in some areas of health care specific to women. For instance, the proportion of women who use menopausal hormone therapy has fallen significantly over the past 20 years. The proportion of women using the pill...
for contraception is declining, particularly among younger women. As regards gynaecological operations, the number of hysterectomies is decreasing. After the sharp rise in Caesarean section rates in the 1990s and 2000s, there are signs of a slight decline since 2012, accompanied by numerous initiatives to promote physiological birth – a development that is also being taken up and promoted by the national health target ‘Health around childbirth’ which was adopted in 2017. Fertility treatment figures, in contrast, have increased sharply.

**Women’s life situations and social diversity**

The life situations of women in Germany are very diverse. Social factors continue to have a decisive influence on health as well as on the development and course of diseases. Socially disadvantaged women are more frequently affected by many chronic, sometimes serious, diseases and have on average a lower life expectancy than women who are better off. Such correlations have also been shown for men. With regard to life expectancy, the differences between men of different education and income groups are actually even greater than for women. Socially unequally distributed material and structural factors, differences in the prevalence of psychosocial risk and protective factors and in health behaviour contribute to the emergence of health inequalities. For example, with increasing levels of education women smoke less frequently and exercise more often, they eat healthier diets and are less likely to be obese.

In addition to analysing the influence of income, education, family situation and occupation on various aspects of health, it is important to include further factors related to life circumstances. These include, for example, a migration history, disabilities, sexual orientation and experiences of violence. Social barriers and discrimination against women can give rise to specific health problems and health needs. Women who have suffered violence (e.g. by their partner or ex-partner) can also develop acute and long-term physical and psychological disease.

The focus chapters of this report analyse selected life situations of women with specific health needs. One chapter looks at the health of that quarter of women in Germany with a family history of migration. Studies show that women in this group often have less access to health care services in the German health system. Their health situation may be impaired by migration-specific conditions, such as an uncertain residence status, language barriers or psychosocial stress and experiences of discrimination. Social situation-related issues, such as unfavourable housing and working conditions, can represent additional factors. Compared to women without a migration background, however, women with a history of migration not only face specific health risks, but also exhibit health advantages, such as on average lower alcohol consumption. The average age of these women is also significantly lower than that of the non-migrant female population. Still, it is important to emphasise that with regard to numerous sociodemographic factors, women with a migration background are a highly heterogeneous group, a fact which is also reflected in health outcomes.

In surveys, around half of female respondents say they have difficulty making health-related decisions. This proportion is even higher among women with low levels of education. Age, education and migration background can all have an influence on how well women are informed about health risks, early detection or even treatment options. Health literacy means having the knowledge, motivation and ability to find, understand and use relevant health information and thus be able to make good decisions for their own health and, if necessary, that of their relatives. Health literacy is highly important both for the women concerned themselves and when taking over care work – which is more often the task of women on average. Strengthening women’s health literacy by providing easily accessible and adequate information is of great importance. Improving women’s (and men’s) levels of knowledge and decision-making competence are also important goals of the German National Cancer Plan. This concerns, on the one hand, the benefits and risks of cancer screening examinations, but also shared decision-making with regard to treatment options. To promote this process, healthcare professionals are to be supported in further improving their communicative skills [18]. An important source of information on women’s health, both for women and for multipliers is the Federal Centre for Health Education (BZgA). Their women’s health portal ([www.frauengesundheitsportal.de](http://www.frauengesundheitsportal.de)) provides up-to-date and validated health information.
Health promotion and prevention can help to reduce social and gender inequalities in health opportunities. This is also stated in Germany’s 2015 Prevention Act (PrävG). Here, for the first time, it was regulated that statutory health insurance services should take gender-specific characteristics into account. In addition, primary prevention and health promotion services were now to contribute to reducing unequal health opportunities. Health promotion serves the goal of strengthening resources for maintaining health. Prevention aims at avoiding or delaying disease. Here, in addition to the individual level of behavioural prevention, which includes health information and training courses for women, settings-based prevention should particularly be strengthened. Structural prevention serves to improve health-relevant living conditions, such as improvements in working conditions, healthy canteen food, non-smoker protection laws or the creation of cycle paths that benefit all women and men, regardless of life circumstances and resources. With its orientation towards life situations, the Prevention Act is set to strengthen structural prevention approaches.

Data availability, research and reporting

As a basis for health and social policy decisions and measures, research and reporting could contribute to further improving women’s health in Germany. Incorporating numerous findings from epidemiological studies, this report also sheds light on topics and gaps in our knowledge which have to date received too little attention in scientific research. Overall, the data available on women’s health in Germany is good: a comprehensive list of the data sources used can be found at the end of this report. However, with regard to frequent conditions affecting women such as benign gynaecological diseases data gaps are apparent. For example, despite the fact that conditions such as endometriosis and uterine prolapse are widespread, no precise figures for prevalence in Germany are available. Comprehensive data and research results are available on women’s health behaviour in all areas considered in this report, but the findings rarely allow conclusions on causes, e.g. motives for smoking or barriers to physical activity in daily life. For health care, for example, information on the reasons for using health care services would be interesting, as would data on the involvement of women in self-help groups.

Data gaps also exist for certain groups of women, for example regarding the health situation of very old women (aged 85 years and older). They are often not well reached by population-based surveys which is partly due to health impairments. The health of women with a migration background, too, continues to be only inadequately reflected by the official statistics, routine data (e.g. data from statutory health insurance) and surveys. There are barriers of accessibility, the recording of a migration background is fragmentary and differentiated analyses of small subgroups are often not possible or are rarely carried out. Also, as regards violence against women and the correlated health impacts, the data situation is limited. While there are annual Police Criminal Statistics, they only record reported incidents of violence and therefore only a part of actual cases. The statistics also contain little background information or findings on the (long-term) consequences of violence against women. The only large German study on the prevalence of violence dates from 2003, more recent data come from a European study carried out in 2012.

The health of women with disabilities is another under-researched field where data is lacking. Often this group is not sufficiently included in surveys of the general population, partly due to a lack of barrier-free survey methods, and is therefore under-represented; e.g. deaf women cannot participate in surveys with (purely acoustic) telephone interviews. Also, women living in institutions or nursing homes are rarely included in survey samples. A first step towards improving the data situation will be taken with a representative survey on participation of people with disabilities, which will be conducted for the first time from 2017 to 2021 [19]. Another study will also close major data gaps with its results: the German Health and Sexuality Survey (GeSiD), the first German sex survey with representative population data, in which about 5,000 people participated [20].

Furthermore, a noticeable lack of exchange exists between epidemiological research, and gender sociological research, gender studies and gender medicine. Studies (and published results) often ignore the distinction established in gender studies and other social and cultural science subjects...
between sex and gender. In this report, an attempt has been made to differentiate between the biological and social aspects of femininity, particularly in explaining empirical findings. Besides transferring the concepts and theories which gender research has established in quantitative epidemiological research, an increased use of qualitative methods (e.g. focus groups) would also make sense. Qualitative methods could contribute to a better understanding of the mechanisms involved in the development of health differences between women and men, as well as between different groups of women.

To finish, let us also take a look at the potential to further develop health reporting. Official statistics and epidemiological studies, large population-based surveys, valid and as up to date as possible, provide the basic data for health reporting. Other data sources used are e.g. registry and administrative data. However, if we attempt to describe the health situation of women purely on the basis of the data available, the risk is that we end up adopting an implicit and often unconsidered or ad hoc view of gender. A homogeneous picture emerges, especially when gender comparisons are made. There is often a lack of data and also a lack of analytical methods to depict the diversity of life situations for women and men and to communicate risks in a differentiated way [21, 22]. Further challenges for health reporting include the selection of explanatory approaches, accuracy, timeliness and, above all, the linkage with empiricism.

A comparison between women and men also neglects gender and sexual diversity, which has become increasingly topical in socio-political debates. A law passed in 2018, for example, attracted a great deal of attention when it made a positive third gender (diverse) for intersex people possible in birth registries for the first time [23]. However, the resultant challenges for research and reporting should not be limited to the issue of a third gender [22]. In a heteronormative society, all women (and men) who do not conform to a binary ‘norm’ are exposed to discrimination in varying degrees and disadvantaged. As a concept, heteronormativity stipulates that there are only two biologically and socially congruent genders which are sexually orientated towards each other [24, 25].

For this report, data and analyses on the health of all persons who consider their gender identity as female was researched and compiled. However, so far there are hardly any reliable data on the health of lesbian, transgender, intersex or queer women. The challenge for future analyses and reports will be to better reflect diversity, both within gender groups, as also regarding gender and sexual diversity [26]. In future, we hope to develop the potential of the intersectionality approach for Federal Health Reporting (GBE) [22]. Intersectionality describes the interaction of different social categories, e.g. gender identity, sexual orientation, education, income, migration background, which influence a person’s life and health situation. All these categories interact and create specific life situations. In addition to a differentiated consideration of life situations and their effects on health, GBE also faces the task of including further groups of people in the reporting systems for whom hardly any data on health status and health needs are available so far. These would include for example homeless women and men, and drug users.

**Conclusion**

According to official statistics, currently over 35 million adult women with very diverse life circumstances and health are living in Germany. Improving women’s health and reducing social and gender inequalities in health and care will require integrating other policy areas alongside health policy (Health in all Policies). Gender-sensitive, focused reporting can help provide scientifically vetted information as a basis for political action. The Strategy on women’s health and well-being in the WHO European Region [27], adopted in 2016, stresses the importance of gender equality for health. The strategy is closely related to the United Nations’ Agenda 2030 with its 17 Sustainable Development Goals (SDGs) [28]. These include ‘Achieve gender equality and empower all women and girls’ (SDG5) and ‘Ensure healthy lives and promote well-being for all at all ages’ (SDG3). Equality between women and men is one of the EU’s objectives. In recent decades and to this day, numerous activities and legal provisions with a major influence on equality policies in the Member States have evolved to the benefit of the health and well-being of women and men in the EU [29].

Gender equality, a fair and equal distribution of health opportunities, a systematic consideration
of gender in all areas of care and life was one of the perspectives of a women-friendly health policy and health care in the first women’s health report back in 2001. The present report shows that while we have made progress, many challenges remain.

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