

## Review

# Severely Handicapped Seniors and in Long-Term Need of Care - Burden of Increasing Age Gender Inequality in Men's Health in Germany

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## Abstract

Severely handicapped seniors and long-term need of care - Burden of increasing age. Gender inequality in men's health in Germany. The deterioration of men's health in old age is illustrated using the example of increasing number of severely disabled seniors and growing need for long-term care in comparison with women using official data. In the period from 2007 to 2017, there has been a considerable increase in the need for long-term care, which cannot be explained solely by changes in legislation and the ageing of the population. The differences between men and women aged 60 and over in terms of severe disability and the need for long-term care are demonstrated.

Keywords: severely handicapped persons, need for long-term care, ageing population, burden of disease, health inequalities, men's health

## Objective and Subjective Health of Male Seniors

Health gains win importance with increasing age. The subjective health, i.e. the assessment of the state of health by the interviewees themselves, has constantly improved over the past decades [1]. However, studies also show that the objectively measurable state of health and the self-assessment of health in old age only rarely coincide [1]. The German Ageing Survey (DEAS) and the Telephone Interview Surveys of the Robert Koch-Institute (DGES) [1, 2], for example, serve as the data basis for subjective health.

Objective data are provided by the statistics on severely disabled persons and nursing care, which were used for the years 2007 and 2017 to be compared. Both statistics have different starting situations and therefore different data. Social criteria are not included compared to the survey data of the Robert Koch Institute (3 social status groups - lower, middle and higher) [2]. Both the survey data and the official statistics show gender inequality, which in turn influences the results (USAID [3] Peter Baker [4]. Gender inequality continues to have a negative impact on many health outcomes. Harmful gender norms affect men and boys by endouring risk-taking and limiting health-seeking behaviors [5].

The strategy of Sustainable Development Goals up to 2030 [6] specifies two health goals, Goal 3: Good Health and Well-being, and Goal 5: Gender Equality, which are

to be achieved worldwide by 2030.

Based on the SDG 2030, the WHO European Region published a men's health report and a "Strategy on the Health and Well-being of Men" [7, 8] in 2018.

It identifies three basic objectives for improving men's health [7,8]:

1. Reducing premature mortality of men due to non-communicable diseases and intentional and unintentional injuries.
2. Improving the health and well-being of men of all ages, while at the same time reducing inequalities, including within the country.
3. Improving equality through structures and approaches that promote men's commitment to self-protection, father role, unpaid care, violence prevention and sexual and reproductive health [8].

These objectives also concern older age, usually outside the employment sector. Risk factors from youth and working age contribute to severe disability and the need for long-term care in old age. This leads to a 4-5 year shorter life expectancy for men. For men with a low level of education, the results are worse than for those with higher qualifications.

## Definitions of Severe Disability and Long-Term Care Severely handicapped

People are disabled if their physical function, mental ability or mental health is highly likely to deviate for more than 6 months from the condition typical for their age and therefore their participation in life in society is impaired. Severely handicapped persons are defined as persons who are granted a degree of disability (GdB) of 50 or more by the authorities for severely handicapped persons. The causes of disability are considered to be congenital disabilities, illnesses, accidents, damage caused by war, military service or civilian service.

The type of disability is classified into 55 categories. Data are available since 1985 [9].

The types of severe disability include the following groupings:

1. Loss or partial loss of limbs (arms and/or legs),
2. Functional limitations of limbs (arms and/or legs),
3. Functional restriction of the spine and trunk, deformation of the thorax,
4. Blindness and visual impairment,
5. Speech or speech disorders, deafness, hearing loss, balance disorders,
6. Loss of one or both breasts, deformities,
7. Impairment of the function of internal organs or organ systems,
8. Paraplegia, cerebral disorders, mental disabilities, addictions,
9. Other and insufficiently designated disabilities.

## Need for long-term care

Persons in need of care are those who have health-related impairments of independence or abilities and therefore require help from others. They must be persons who are unable to independently compensate for or cope with physical, cognitive or psychological impairments or health-related burdens or demands.

The need for long-term care must exist permanently, probably for at least six months [10]. Nursing care insurance was introduced in 1995, nursing care statistics have been carried out every 2 years since 1999. In 2017, the previous concept of nursing care levels I-III was replaced by nursing care degree levels 1-5. In addition, persons with limited everyday competence (nursing level 1) and persons with dementia were included. The data collection includes persons with statutory and private health insurance. The quality of the data collection for 2017 includes an estimated under-reporting of approx. 100,000 persons in need of long-term care.

In the following, the example of severe disabilities and the need for long-time care of men and women aged 60 and over will be used to illustrate how the health and well-being of the elderly population are assessed on the basis of recognised severe disabilities and the need for care. It should be noted that both the recognition of a serious disability and the need for care must be applied for

by citizens or their legal representatives.

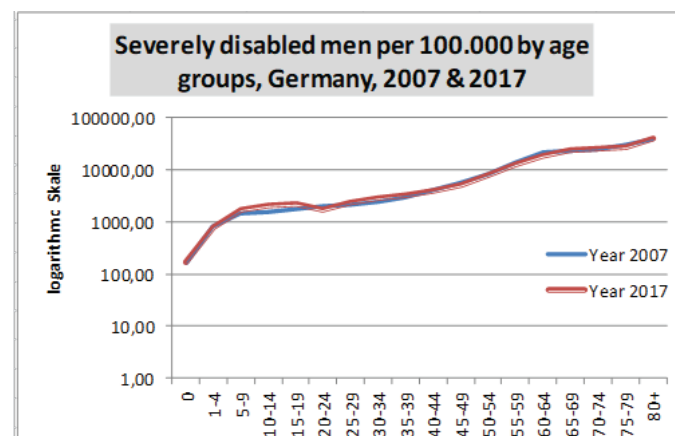
For this reason, the data and calculated rates quoted below are rather lower than they would have been if an application had been submitted 100% in case of need. Since both severe disabilities and the need for long-term care are considered with financial and other advantages for social participation, a relatively high degree of completeness can be assumed.

## The development of the severe disability of senior citizens in Germany from 2007 to 2017

The Federal Statistical Office publishes a report on severe disability every two years [9].

At the end of 2017 there were 7,766,573 severely disabled persons in Germany, of whom 3,928,518 were men and 3,838,054 women (Table 1). This corresponds to 9.6% of the male population and 9.2% of the female population. 10 years earlier, in 2007, there were a total of 6,918,172 severely disabled person, the percentage was 8.9% for men and 7.9% for women. Table 1 show that the higher figures for men are mainly due to the age groups 55+ and older. The logarithmic graph of the severely disabled rates of men for the years 2007 and 2017 shows a similar curve (Figure 1), but for men over 40 it is somewhat higher than for the younger age groups.

The absolute figures for severely disabled men in 2017 are higher than for women, with the exception of women over 75 years of age, due to the higher life expectancy of women (Table 1, Figure 2). In the 80+ age group, 30% of men and 36% of women are severely disabled (Table 1, Figure 1 and Figure 2).



**Figure 1.** Severely disabled men by age groups, Germany, 2007 and 2017

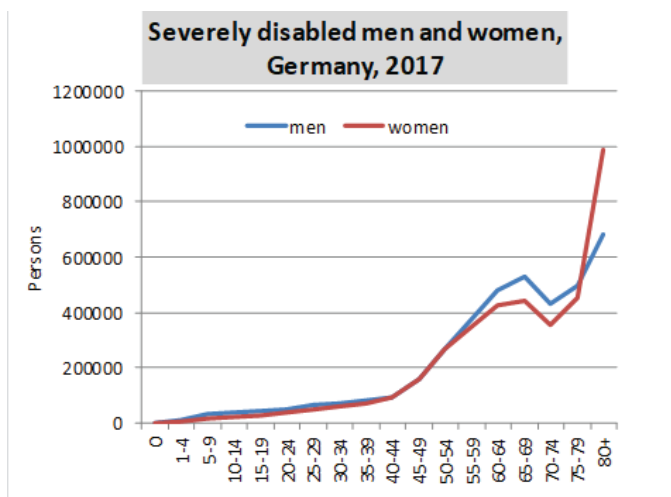
Source: © Federal Statistical Office. Severely disabled persons 2017. Own calculations

Standardisation to the European standard population shows 6,918 severely disabled men and 5,858 severely disabled women per 100,000 of the standard population for 2017. The higher rate of men is clearly visible after standardisation. Compared to 2007, there has been an increase in the standardised rate for women (5,452 per 100,000 women in 2007), while there has been a decrease for men (7,199 per 100,000 men in 2007).

**Table 1.** Severely disabled persons by age groups and sex, Germany 2017.

Age groups	Severely disabled persons by age groups and sex, Germany, 2017								
	Population 31.12.2017	Severley diabled m.	Per 100.000 of female pop.	Female population	Severley diabled w.	Per 100.000 of female pop.	Male population	Severley diabled m.	Severley diabled m.
0	785.074	01.153	00.146,87	382.505	00.485	00.126,80	402.569	402.569	00.165,93
1-4	3.061,704	21.284	00.695,17	1.490.055	09.171	00.615,48	1.571.649	1.571.649	00.770,72
5-9	3.335,594	51.614	01.547,37	1.464.176	20.089	01.372,03	1.871.418	1.871.418	01.684,55
10-14	3.682,765	63.416	01.721,97	1.789.506	24.314	01.360,22	1.895.259	1.895.259	02.063,15
15-19	4.080,567	77.017	01.887,41	1.949.255	30.411	01.560,13	2.131.312	2.131.312	02.186,73
20-24	4.602,514	89.199	01.938,05	2.189.438	37.582	01.716,51	2.413.076	2.413.076	02.139,05
25-29	5.298,080	116.408	02.197,17	2.548.258	50.783	01.992,85	2.749.822	2.749.822	02.386,52
30-34	5.290,252	134.853	02.549,08	2.573.08	2.573.555	60.698	02.358.53	02.358.53	02.729,60
35-39	5.163,210	156.354	03.028,23	2.550.417	73.3999	02.877,92	2.616.793	2.616.793	03.174,95
40-44	4.788,357	185.944	03.883,25	2.377.131	91.405	03.845,18	2.411.226	2.411.226	03.920,79
45-49	5.943,287	320.875	05.398,95	2.944.060	161.730	05.493,43	2.999.227	2.999.227	05.306,20
50-54	6.968,045	539.711	07.745,52	3.450.056	268.980	07.796,40	3.517.989	3.517.989	07.695,62
55-59	6.401,516	727.492	11.364,37	3.205.222	348.010	10.857,59	3.196.294	3.196.294	11.872,56
60-64	5.375,053	907.052	16.875,22	2.747.063	427.913	15.577,11	2.627.990	2.627.990	18.232,15
65-69	4.711,694	968.117	20.547,11	2.459.543	441.048	17.932,11	2.252.151	2.252.151	23.402,92
70-74	3.611,909	783.724	21.698,33	1.927.417	353.852	18.358,87	1.684.492	1.684.492	25.519,39
75-79	4.235,423	951.336	22.461,42	2.350.988	451.742	19.214,99	1.884.435	1.884.435	26.511,61
80+	5.150.685	1.671.024	32.442,75	3.245.519	986.442	30.393,97	1.905.166	1.905.166	35.932,93
<b>Total</b>	<b>82.485,729</b>	<b>7.766.573</b>	<b>09.415,66</b>	<b>41.642.164</b>	<b>3.838.054</b>	<b>09.216,75</b>	<b>40.843.565</b>	<b>40.843.565</b>	<b>09.618,45</b>
<b>SDR*</b>			<b>06.376,20</b>			<b>05.858,10</b>			<b>06.956,60</b>

Source: © Federal Statistical Office. Severely disabled persons 2017. Own calculations

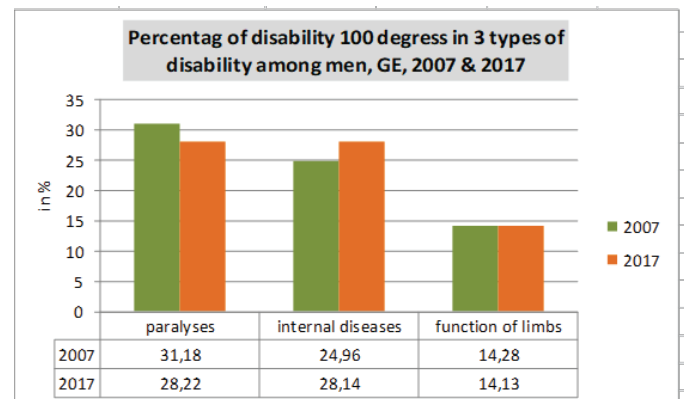


**Figure 2.** Severly disabled men and women, Germany, 2017  
Source: © Federal Statistical Office. Severely disabled persons 2017. Own calculations

In absolute terms, the number of severely disabled men rose from 3,587,250 in 2007 to 3,928,519 in 2017, an increase of 9.5%. Among women, there was an increase from 3,330,922 severely disabled women in 2007 to 3,838,054 severely disabled women, which corresponds to an increase of 15.2% (Table 1).

The most severe disability is classified as degree of disability 100. In 2017, 934,762 men (24% of all severely

disabled men) and 883,619 women (23% of all severely disabled women) were classified in the category "degree of disability 100". For the numerically large group of the 1. Paraplegia, cerebral disorders, mental and psychical disabilities, addictive diseases 2. Impairment of the function of internal organs or organ systems, and the 3. Functional restrictions of limbs (arms and legs). The proportion of the degree of disability 100 for men was determined for the years 2007 and 2017 (Figure 3).



**Figure 3.** Proportion (%) of most severe disabilities, Germany, 2007 & 2017

Source: © Federal Statistical Office. Severely disabled persons 2007 & 2017. Own calculations

In the group of paraplegia there is the highest proportion of severely disabled men (degree of disability 100) with 31% in 2007 and 25% in 2017 (decreasing), followed by the impairment of the function of internal organs with 25% in 2007 and 28% in 2017 (increasing) and the group "functional impairment of limbs" with less than 15% severely disabled persons with degree of disability 100.

### The development of the need for long-term care of senior citizens in Germany from 2007 to 2017

The Federal Statistical Office publishes the results of the nursing statistics every two years, which contain an

overview of those in need of nursing care, outpatient and inpatient nursing facilities and nursing staff.

In 2017, a total of 3,414,378 people were classified as in need of long-term care [10], corresponding to 4.1% of the population. The number of women in need of long-term care was 2,146,460, which corresponds to 5.1% of the female population. With 1,267,918 men, the number of men in need of long-term care was only 3.1% of the men (Table 2). Persons in need of long-term care are cared for either in the home environment by outpatient nursing services or relatives or in the 14,500 nursing homes (64 persons in need of long-term care on average per home).

**Table 2.** Persons in need for care by age and sex, Germany, 2017

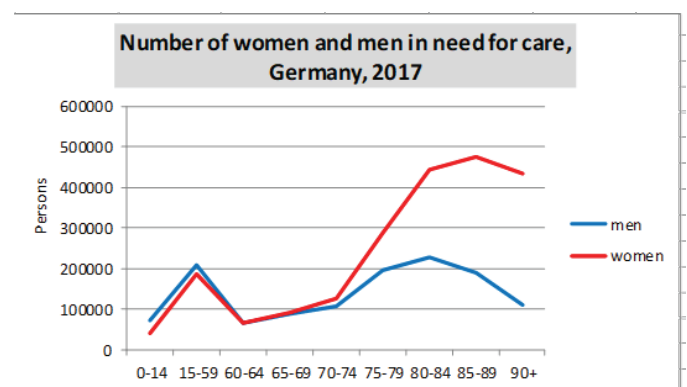
Age groups	Total			Female			Male		
	Population 31.12.2017	Persons in need of care	Per 100.000 of popu.	Female population	Females in need of care	Per 100.000 of female popu.	Male Population	Men in need of care	Per 100.00 of male pop.
0-14	11.171.759	113.854	01.019,12	5.430.864	41.200	41.200	5.740.895	72.654	01.265,55
15-59	48.535.828	392.969	00.809,65	23.787.392	185.031	185.031	24.748.436	207.938	00.840,21
60-64	5.37.053	130.707	02.431,73	2.747.063	64.080	64.080	2.627.990	66.627	02.535,28
65-69	4.711.694	179.253	03.804,43	2.459.543	89.951	89.951	2.252.151	89.302	03.965,19
70-74	3.611.909	231.292	06.403,59	1.927.417	124.634	124.634	1.684.492	106.658	06.331,76
75-79	4.235.423	485.239	11.456,68	2.350.988	288.213	288.213	1.884.435	197.026	10.455,44
80-84	2.885.211	672.001	23.291,23	1.698.542	442.813	442.813	1.186.669	229.188	19.313,56
85-89	1.494.440	664.772	44.453,27	968.220	476.865	476.865	527.220	187.907	35.641,10
90+	770.034	544.291	70.684,02	578.757	433.673	433.673	191.277	110.618	57.831,31
<b>Total</b>	<b>82.792.351</b>	<b>3.414.378</b>	<b>04.124,03</b>	<b>41.948.786</b>	<b>2.146.460</b>	<b>2.146.460</b>	<b>40.843.565</b>	<b>1.267.918</b>	<b>03.104,33</b>
<b>SDR*</b>			<b>02.187,80</b>						<b>02.092,40</b>

In the care statistics, those in need of care who have reached retirement age are divided into 5-year age groups. This shows that 2.3 to 2.5% of 60-64 year olds are in need of long-term care, while this proportion rises to 75% for women and 58% for men by the age of 90+. Figure 4 shows how the number of women aged 75 and over in need of care is rising much faster than the number of men in need of care. In the 10 years between 2007 and 2017, the number of men in need of care rose sharply in all age groups, but especially by the age of 75+ (Figure 5). The highest increase occurred in the age group of 80-84-year-old men from 113,766 in 2007 to 229,118 in 2017, which corresponds to a doubling in only 10 years [11, 10] (Figure 5 and Figure 6).

The increase in the need for long-term care in the period from 2007 to 2017 affects all age groups and both women and men (Figure 6). The increase for men occurs from the 75-79 age group onwards, while the figures for women were higher in the 60-69 age group than for men. The average increase for men from 2007-2017 is 34.74%, for women 27.26% lower (Table 2).

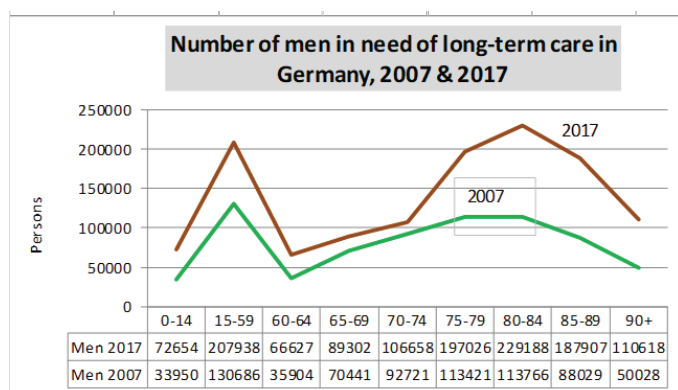
### Further life expectancy of 65+ year old men and women

The calculation of life expectancy for 2015/2017 by the Federal Statistical Office [12] shows that men in all age groups have lower life expectancy than women (Table 4).



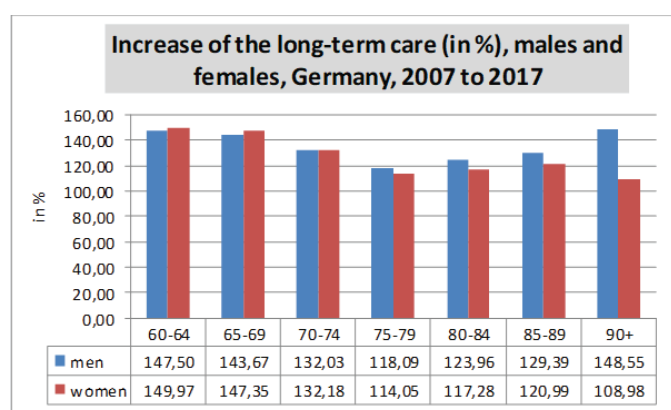
**Figure 4.** Women and men in need for care, Germany, 2017  
Source: © Federal Statistical Office. Nursing care statistics 2017. Own calculation





**Figure 5.** Men in need of long-term care 2007 & 2017, Germany

Source: © Federal Statistical Office: Nursing care statistics 2007 & 2017. Own calculation



**Figure 6.** Increase in the need for long-term care from 2007 to 2017, GE

Source: © Federal Statistical Office: Nursing care statistics 2007 & 2017. Own calculations

**Table 3.** Number and proportion of people in need of long-term care at the highest level

Year	Care level III	Care degree 4	Care degree 5
2007	291,752 = 12.98%		
	549,375 = 16.09%	224,176 = 6.57%	
Total			22.66%

Source: ©Federal Statistical Office: Care statistics 2007 und 2017. Own calculation [10,11]

**Table 4.** Life expectancy 2015/2017 by gender and age groups

Age in years	Men	Women
0	78.36	83.18
65	17.80	21.00
75	10.93	13.03
85	5.47	6.45
95	2.55	2.88

Source: ©Federal Statistical Office. Life Tables 2015/2017. (accessed: 18.03.2019)

## Discussion and Conclusions

Both the survey data and the official statistics show gender inequality, which in turn influences the results [3, 4]. This confirms scientific results on gender inequality for severe disabilities and the need for long-term care [5]. The Sustainable Health Goal 5 (Gender Equality) also applies to seniors and should be taken into account in the SDG indicators [6, 13]. The same applies to the men's health report published in 2018 by the WHO European Region and the "Strategy on the Health and Well-being of Men" [7, 8]. Objective 2 of the strategy is particularly in demand: 2.) improving the health and well-being of men of all ages, while at the same time reducing inequalities within the country.

Neither in the context of implementing the Prevention Act nor in the context of the Sustainable Health Goals of the United Nations should the importance of the health situation of seniors be underestimated.

Depending on the social class, health-related restrictions in everyday life are estimated by about 50% of men over 75 with high social status and over 60% with medium and low social status [2,1]. For women, the proportions are slightly higher in all three social groups. The official data contain disabilities from a degree of 50 to 100. Some severely disabled people can compensate for the need for help themselves, but many others need constant help. In particular, among the 2,141,117 severely disabled men over 65 years of age, the proportion of people who need care due to their disability is increasing. The proportion of severely disabled men is particularly high in the group of paraplegics, cerebral disorders, mental and spiritual disabilities, addictions, but also in the group of internal diseases with 25 to 30%.

It may be assumed that the surveys of the Robert Koch-Institute GEDA and the age survey DEAS of the Centre for Ageing Studies do not completely cover severely disabled persons with the highest degree of disability and thus the proportions of respondents with good subjective health do not correspond to the official data. As far as the need for long-term care is concerned, we note an increasing trend, also with regard to age-standardised values (reference to the European standard population), so that the ageing of the population is attempted to be excluded.

In absolute figures, there was a strong increase from 75 years onwards, so that in the age group of 80-84-year-old men the figure doubled within 10 years. It is unlikely that the health situation has deteriorated so much despite better subjective health values. Rather, it can be assumed that the increased care expenditure makes it necessary to submit an application for care dependency in order to cover the financial expenditure for care.

As part of the Sustainable Development Goals (SDG), Germany publishes a progress report by the Federal Statistical Office every two years [13]. So far, the need for long-term care has not been the subject of these reports. To assess the health situation of senior citizens and the

gender inequality in health, however, the indicator of the need for long-term care should be considered as a criterion of poor health or as a sign of the burden of disease.

While premature mortality leads to a loss of 28.3% of the male population up to the age of 70, severe disability and the need for long-term care reduce quality of life and gender equality. The increase in the need for increased long-term care (nursing degrees 4 and 5) within 10 years by 35% among male seniors in need of long-term care and 27% of all female seniors requires further analysis. For 2017, 22.7% of all persons in need of long-term care will be in the highest care degrees 4 and 5 (Table 3). Previous publications of the Foundation of Men's health from official data on burden of disease in seniors have met with high international attention [14-16].

The Men's Health Foundation is a member of the Federal Men's Forum with its 34 members, and is committed to positively influencing men's health and well-being. Translated with [www.DeepL.com/Translator](http://www.DeepL.com/Translator).

### Conflict of Interest

There is no conflict of interest and no financial support has been granted. No fees were paid for presentations on the subject.

### References

1. Federal Centre for Health Education (Hg) . The "Old Boys" II. 04 Health Situation. 2018; pp. 32-67 (Federal Center for Health Education BZgA (Hg) (2018). The "Young Elder" II. 04 Health situation.2018; SS. 32-67)
2. German Centre for Gerontology. Federal Statistical Office. Robert Koch-Institute (Hg) Contributions to the Federal Health Reporting. Health and disease in old age. 2009. (German Center for Gerontology. Federal Office of Statistics. Robert Koch Institute (Hg). Contributions to federal health reporting. Health and illness in old age. 2009)
3. USAID (2017). Promoting gender equality through health. <https://www.usaid.gov/what-we-do/global-health/cross-cutting-areas/gender-equality>
4. Baker P. Men's health: time for a new approach. *Physical therapy reviews*. 2018; PP. 13.
5. Kapilashrame A. How serious are global health leaders about gender equality? *BMJ* 2018; 361 .
6. United Nations: Sustainable Development Goals. 2019. <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>
7. WHO Regional Office for Europe .The health and Well-being of Men in the WHO European Region – Better Health through a Gender Approach.2018. <http://www.euro.who.int/de/health-topics/health-determinants/gender/publications/2018/the-health-and-well-being-of-men-in-the-who-european-region-better-health-through-a-gender-approach-2018>.
8. WHO Regional Office for Europe. Strategy on the Health and well-being of Men in the WHO European Region EUR/RC 68/12. 2018. Adopted on the 68th. Session of the Regional Committee for Europe, Rome, 17.-20. [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0007/378205/68wd12g\\_MensHealthStrategy\\_180480.pdf](http://www.euro.who.int/__data/assets/pdf_file/0007/378205/68wd12g_MensHealthStrategy_180480.pdf)
9. Federal Statistical Office of Germany (2017). Social benefits. Severely disabled people 2017, published 2019 (Social benefits. Handicapped people 2017, published 2019). [www.destatis.de/DE/Publikationen/Themat](http://www.destatis.de/DE/Publikationen/Themat)
10. Federal Statistical Office of Germany (2018) Nursing care statistics 2017, published 2018. [www.destatis.de/DE/Publikationen/Themat](http://www.destatis.de/DE/Publikationen/Themat)
11. Federal Statistical Office of Germany (2008) Nursing care statistics 2007, published 2008). [www.destatis.de/DE/Publikationen/Themat](http://www.destatis.de/DE/Publikationen/Themat)
12. Federal Statistical Office of Germany (Hg). Life Expectancy 2015/2017. [https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Sterbefaelle-Lebenserwartung/\\_inhalt.html](https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Sterbefaelle-Lebenserwartung/_inhalt.html)
13. Federal Statistical Office of Germany (2017). Sustainable development in Germany. Indicator Report 2016 (Sustainable development in Germany. indicator report 2016). [www.destatis.de/DE/Publikationen/Themat](http://www.destatis.de/DE/Publikationen/Themat)
14. Bardehle D. Subjective health and burden of disease of seniors (Subjective health and disease burden of seniors). *Urologist* 2015. 54:1717-1724
15. Bardehle D. International View on Burden of Disease and Subjective Health of Male Seniors 65+ in Germany, 2015. *Open Access J Nur*. 2018; 1: 18-29
16. Bardehle D. Burden by chronic diseases and disability and nursing care situation of seniors in Germany up to 2015. *Nursing and palliative care (Nurs Palliat Care)*. 2017.

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