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How Healthy did Older People Feel During the Pandemic Who had not Experienced Covid-19 Themselves?

5

Stefan Stuth and Jenna Wünsche

5.1 Key Messages

The self-rated health of people in the second half of life did not deteriorate between 2017 and the second pandemic wave in winter 2020/21. Among people who did not report having been infected with the coronavirus, the proportion of people with (very) good and (very) poor health assessments remained unchanged; only the proportions reporting moderate health assessments decreased. This is particularly remarkable, because respondents' self-rated health deteriorated in the period from 2014 to 2017. It is possible that, for some respondents, being asked to compare their own state of health with the sometimes very poor health situations of people seriously ill with Covid-19 led them to more favourably assess their own health. This could explain why the previously observable downward trend in self-rated health assessments slowed down during the Covid-19 pandemic.

Changes in self-rated health between 2017 and the second pandemic wave depended on the age at which people experienced the Covid-19 pandemic: the most favourable developmental trend among people in the second half of life was evident in the youngest age group. Among working-age respondents, there was an improvement in self-rated health between 2017 and the winter of 2020/21 that, interestingly, was not yet evident between 2014 and 2017 and could thus be indicative of a pandemic-related trend. Among respondents who were at

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an age threshold around which people enter their retirement, self-rated health had stabilised by winter 2020/21 after an observable deterioration between 2014 and 2017. Respondents of retirement age continued to experience a persistent deterioration in their health assessments between 2014, 2017 and winter 2020/21, indicating an age-related rather than a pandemic-related trend.

Both women and men assessed their health during the second wave of the pandemic in a similar way as in 2017. While men did not experience any changes in their self-rated health between 2014 and 2017, women experienced a deterioration in their self-rated health during the same survey period. However, this development did not continue during the Covid-19 pandemic.

The development of self-rated health was similar between 2017 and the second wave of the pandemic among people with different socioeconomic status (SES). Regardless of whether people had a low, middle or high socioeconomic status, they did not experience a deterioration or an improvement in their self-rated health assessments between 2017 and the winter of 2020/21. While there were no upward or downward trends among people from the highest status group between 2014 and 2017, self-rate health deteriorated among people from the other two status groups during this survey period. For these two groups, as well as people in transition to retirement and women, there was evidence of an interruption of the downward trend in self-rated health until the second wave of the Covid-19 pandemic.

5.2 Introduction

Self-rated health describes an individual's assessment of their own state of health. This self-assessment includes information on illnesses and physical impairments but also on psychological and social well-being (Miilunpalo et al. 1997). Unlike other health indicators, however, self-rated health is difficult for external observers to assess—because people do not rely solely on objective information when assessing their health but arrive at an overall judgement of their health through complex assessment processes. For example, people compare their own health with that of other people. In addition, people can differ in the extent to which they incorporate a wide range of information about their own health into their overall health assessment (Jylhä 2009). This high degree of subjectivity is reflected in the fact that people's health assessments remain significantly more positive into late adulthood than would be expected based on age-related physical decline alone (Spuling et al. 2017). One reason for this is that older people tend to compare their health with that of other older people. Their physical limitations are thus

perceived as more "normal" and are deemed less important when they assess their own state health (Cheng et al. 2007).

Self-rated health hence exhibits a certain adaptability to a deteriorating health situation, meaning that people can feel subjectively healthy even if this does not seem plausible from the outside. The question to be answered in the following is: how effectively have people in the second half of life managed to preserve their self-rated health assessments in the face of the many challenges of the Covid-19 pandemic? To answer this question and to separate the direct health impact of a coronavirus infection from the indirect health challenges caused by pandemic-containment measures, this article focuses on people in the second half of life who had not contracted Covid-19 themselves when surveyed.

The measures taken to contain the Covid-19 pandemic may have negatively affected health and well-being in a variety of ways (Gaertner et al. 2021). Contact restrictions and physical distancing rules, switches from working in the office to working from home or to short-time work, and also fears and losses related to the coronavirus have shaped the respondents' everyday life. It is therefore hardly surprising that previous studies have revealed sometimes very unfavourable trends in a wide range of health-related areas of life due to the Covid-19 pandemic: by the summer of 2020, the risk of loneliness (see chapter "Loneliness increased significantly among people in middle and older adulthood during the Covid-19 pandemic") and psychological stress (Skoda et al. 2021) had increased and the proportion of people who were physically active had decreased. (see chapter "Physical activity during the Covid-19 pandemic. Changes in the frequency of sport and walking among people in the second half of life"). It is possible that people in the second half of life reached the limits of the adaptability of their subjective health assessments because of the impact of the Covid-19 pandemic on social inclusion, psychological well-being and a physically active lifestyle, which are important pillars of health. If this is the case, it should have manifested in a deterioration of self-rated health.

Are there population groups whose health was more robust to the challenges of the Covid-19 pandemic and are there social groups that were more vulnerable and thereby experienced greater declines in health assessments in the wake of the Covid-19 pandemic?

First, *age* should play a role in how self-rated health changed during the Covid-19 pandemic. Older people have been and continue to be a particular focus of attention these days. According to the Robert Koch-Institute (2020), the risk of severe Covid-19 increases steadily from the age of 50 to 60. While the increased risk for older adults is statistically undisputed, we can also assume that the communication of risks by politicians and the media had undesirable side effects.

The omnipresent portrayal of older people as a particularly vulnerable group, the avoidance of social contacts with older people and possible experiences of paternalism among family and friends could have particularly damaged older people's health-related self-concept and social well-being. It is therefore conceivable that older adults' self-rated health suffered more during the Covid-19 pandemic than the self-rated health of younger age groups.

We could also expect to find differences in pandemic-related changes in self-rated health with regard to *gender.* Although men and women have reported feeling similarly healthy in past DEAS surveys (Wurm et al. 2010; Spuling et al. 2017), women's self-rated health may have particularly deteriorated due to their pandemic-related increase in care and support provision. In fact, not only did women greatly increase the care they provided to relatives in the summer of 2020, but women providing care also exhibited a particularly large increase in depressive symptoms (see chapter "Covid-19 crisis = care crisis? Changes in care provision and care-givers' well-being during the Covid-19 pandemic"). The increased psychological burden of caring for relatives could have contributed to the fact that women experienced greater deteriorations in self-rated health during the Covid-19 pandemic than men.

Finally, differences between *socioeconomic status (SES) groups* might have played a role in the development of self-rated health during the Covid-19 pandemic. Previous studies have already impressively documented the health-related disadvantages experienced by people with low versus high SES. For example, people with high SES seem to be less likely to report health-related limitations in their daily lives, they are more likely to rate their overall health and mental well-being as better, and they are ultimately more likely to live longer than people from lower socioeconomic backgrounds (Lampert and Hoebel 2019 for an overview). Occupational status, income and educational background are taken into account when classifying people's SES (Ganzeboom et al. 1992). In this respect, the often poorer health of lower SES individuals can be attributed, among other things, to psychological stress due to financial hardship, unfavourable working conditions and poorer health knowledge (Kroh et al. 2012). These inequality dynamics may have been further exacerbated by the pandemic: Lower SES individuals had less material resources to compensate for pandemic-related wage losses, a greater likelihood of working in occupations with an increased risk of infection (e.g., factory jobs) and a perceived inability to control their own likelihood of infection (Rattay et al. 2021; see chapter "How did individuals in the second half of life experience the Covid-19 crisis? Perceived threat of the Covid-19 crisis and subjective influence on a possible infection with Covid-19"). These factors may have contributed to the fact that socioeconomically disadvantaged peo-

ple felt particularly threatened by and burdened with health problems during the Covid-19 pandemic.

Research questions
Against this background, this chapter examines the following questions:

- What changes in self-rated health were seen during the Covid-19 pandemic in people in the second half of life who did not themselves contracted Covid-19?
- How did changes in self-rated health differ between specific population groups (age groups, gender and socioeconomic status groups)?

The results presented in this chapter are based on the most recent survey wave of the German Ageing Survey, which was conducted during the second wave of the Covid-19 pandemic (winter 2020/21), as well as on two further survey waves conducted before the Covid-19 pandemic (2014 and 2017). All analyses are based on a longitudinal dataset that was refined to only include respondents who participated in each of the three survey waves and who had not contracted Covid-19 themselves by the time of the survey. To gain insights into how self-rated health changed in the wake of the Covid-19 pandemic, the analysis examined trends in self-rated health between 2014 and 2017 and compared them with trends between 2017 and the winter of 2020/21. This made it possible to distinguish "normal" age-related changes in the assessment of self-rated health from changes that were presumably due to the changed living situation following the Covid-19 containment measures. Of course, the Covid-19 pandemic could also have had a direct negative impact on self-rated health, i.e. via severe Covid-19. However, in winter 2020/21, only 2.29 per cent (n = 93) of DEAS participants reported having contracted the coronavirus. This group of people is too small to enable representative analyses of the health consequences of a coronavirus infection. However, to be able to separate the health consequences of a Covid-19 infection from the overall impact of the pandemic situation—such as the threat posed by the virus, worries about relatives, consequences of pandemic-containment measures—this chapter concentrates exclusively on health assessments by people who stated that they had not contracted Covid-19 themselves.

The following evaluations are thus based on the information provided by 4054 people who remained in the sample after these selection criteria were applied. These were respondents who were between 40 and 90 years of age in the 2014 DEAS survey, who also participated in the 2017 and 2020/21 DEAS surveys and who stated that they had not contracted the coronavirus up to the time of the last survey in the winter of 2020/21. The analyses will examine how these individu-

als' self-rated health changed when comparing the survey years 2014, 2017 and the winter of 2020/21. They will also examine whether there were age, gender or socioeconomic differences in a) the baseline level of self-rated health in 2014 and b) the changes in self-rated health between 2014 and 2017 or 2017 and the winter of 2020/21.

The analyses tested whether the observable changes were statistically significant by comparing proportion values, taking into account the variance and the complex sample design of the German Ageing Survey.

It should be noted that people who participated in all three survey waves might differ systematically from those who skipped at least one survey. For example, individuals who enjoyed particularly good health might have participated consistently in the DEAS surveys, while those who increasingly experienced poor health might have dropped out of the study or missed interviews. If this possibility was not taken into account, one would arrive at an overly positive evaluation of health trends during the Covid-19 pandemic. To counter this methodological problem, the evaluations used longitudinal weights. The weights were developed with the help of statistical models and assigned a higher value to population groups that more often do not participate in the survey, for example, due to poor health. This established statistical method delivers representative and unbiased results, even if not every respondent participates in every DEAS survey.

In order to answer the present questions, information on the following topics was evaluated:

Self-rated health

Respondents were asked to rate their current state of health. They had the choice between the answer alternatives very good, good, medium, poor and very poor. The answers very good and good were combined in the group "(very) good". The answers poor and very poor were combined in the group "(very) poor".

Grouping variables

Age. Three age groups were formed to examine the role of age. The year 2014 served as the reference year. In 2014, 43.3 per cent of the respondents were between 40 to 59 years old, 23.9 per cent were between 60 to 69 years old and 32.8 per cent were between 70 to 90 years old. Within the observation period, all respondents aged by about six years: for example, people in the youngest age group were between 40 to 59 years old in 2014, they were between 43 to 62 years old in 2017, and between 46 to 65 years old in 2020/21. For the sake of simplicity, we will refer to the respondents' age in 2014 when presenting the results.

Gender. Women and men were identified based on their self-reports (men: 45 per cent of all respondents; women: 55 per cent of all respondents).

Socioeconomic status. Socioeconomic status (SES) refers to the position of individuals within society. Respondents' SES is measured using the Socio-Economic Index of Occupational Status (ISEI; Ganzeboom et al. 1992) and is based on the occupation that the respondent is or was most recently engaged in. The ISEI combines information on income and education to determine the socioeconomic status of occupations and can range between a value of 12 (agricultural assistants) and 90 (judges). Respondents' ISEI values were averaged over all three survey time points, then ranked in ascending order and divided into 5 equally sized subgroups (quintiles). Following the procedure of the Robert Koch Institute (Lampert et al. 2013) respondents belonging to the first subgroup (18.9 per cent) were categorised as respondents with low SES. Respondents belonging to subgroups 2, 3 or 4 (61.1 per cent) were deemed to have a middle SES and persons belonging to the last subgroup (20 per cent) were categorized as having a high SES.

5.3 Changes in Self-Rated Health During the Covid-19 Pandemic

In 2014, more than half (55.5 per cent) of people aged 40 and older rated their health as (very) good (Fig. 5.1). A third (34.6 per cent) of respondents reported having moderate health and one in ten (9.9 per cent) rated their health as (very) poor. By 2017, respondents' self-rated health had worsened: just 51.2 per cent reported (very) good health, while the proportion of respondents reporting moderate health had increased to 37.5 per cent. The (very) poor health ratings, by contrast, remained stable. This unfavourable development did not continue into the winter of 2020/21 but rather slowed down: During the second wave of the Covid-19 pandemic, the same proportions of respondents rated their health as (very) good or (very) poor as had done in 2017. Only the group reporting moderate health declined slightly (by 2.5 per cent points).

To investigate how self-rated health developed during the Covid-19 pandemic among people from different population groups, we differentiated changes in self-rated health by age, gender and socioeconomic status.

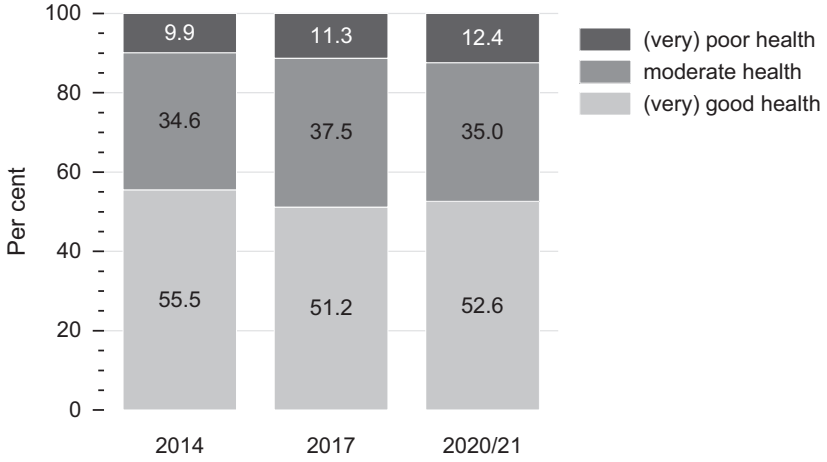

Fig. 5.1 Changes in self-rated health, total, 2014, 2017 and 2020/21 (in per cent). *Source* DEAS 2014 (n = 4054), DEAS 2017 (n = 4054), DEAS 2020/21 (n = 4054), weighted analyses, rounded estimates. Statistically significant changes between 2014 and 2017, ($p < 0.05$): Decrease in the proportion of people with (very) good self-rated health; increase in the proportion of people with moderate self-rated health. Statistically significant changes between 2017 and 2020/21 ($p < 0.05$): Decrease in the proportion of people with moderate self-rated health

5.4 Age Differences in Changes in Self-Rated Health

For people from different age groups, different trends in self-rated health were evident in the study period (2014, 2017 and 2020/21, Fig. 5.2).

In the initial survey year, the level of self-rated health already differed between the youngest and oldest age groups: In 2014, people of working age (40–59-year-olds) more often reported (very) good health (58.2 per cent) and less frequently reported moderate health (31.5 per cent) than people of retirement age (70–90-year-olds), of whom 50.7 per cent rated their health as (very) good and 39.5 per cent reported their health as moderate.

Respondents from the youngest age group assessed their self-rated health as similar in 2014 (then aged 40 to 59) and 2017 (when they were aged 43 to 62). In the winter of 2020/21 (when they were aged 46 to 65), by contrast, they more frequently rated their health as (very) good (increase of 5.8 per cent points) and less frequently as moderate (decrease of 4 per cent points) than in 2017. Since self-

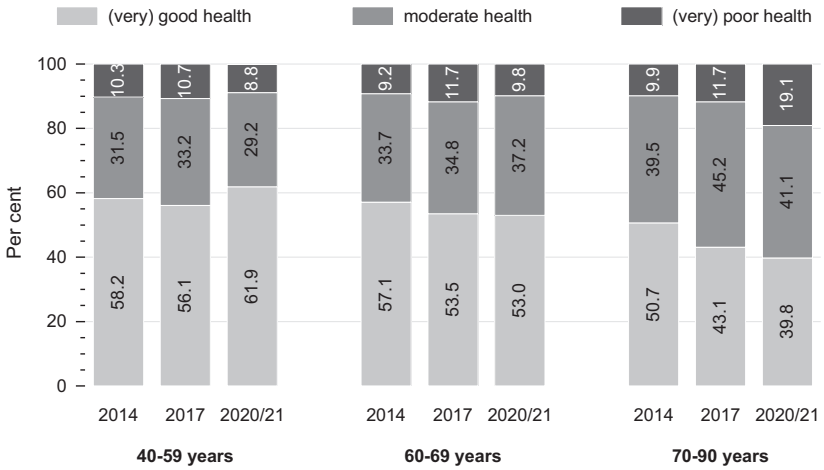

Fig. 5.2 Changes in self-rated health, by age group, 2014, 2017 and 2020/21 (in per cent). *Source* DEAS 2014 (n = 4054), DEAS 2017 (n = 4054), DEAS 2020/21 (n = 4054), weighted analyses, rounded estimates.Statistically significant changes between 2014 and 2017, ($p < 0.05$): Decrease in the proportion of people with (very) good self-rated health among 60–69-year-olds and 70–90-year-olds. Statistically significant changes between 2017 and 2020/21, ($p < 0.05$): Increase in the proportion of people with (very) good self-rated health and decrease in the proportion of people with moderate self-rated health among 40–59-year-olds; increase in the proportion of people with (very) poor self-rated health among 70–90-year-olds. Age groups differ statistically significantly ($p < 0.05$) in the baseline level in 2014 between 40–59-year-olds and 70–90-year-olds in terms of (very) good and medium health

rated health remained stable between 2014 and 2017, and the favourable developmental trend only emerged between 2017 and 2020/21, this suggests a connection with the Covid-19 pandemic.

For people who belonged to the middle age group in 2014 (60- to 69-year-olds in 2014), trends in self-rated health were less positive in the same observation period. In 2017 (when they were aged 63 to 72 years old), fewer respondents reported (very) good health than in 2014 (decrease of 3.6 per cent points). However, this trend did not continue into the second pandemic wave. Instead, people who were around the age related threshold to retirement in 2014 assessed their health in the survey year 2020/21 (when they were aged 66 to 75) as similar to their health in 2017. Hence, the previously observable deterioration in self-rated health stopped.

However, the most unfavourable developmental trend in self-rated health was in the oldest age group (70 to 90-year-olds in 2014). Like the middle age group, they also rated their health as worse in 2017 (when they were aged 73 to 93) than in 2014. The deterioration was due to a decline in (very) good health ratings by 7.6 per cent points. Unlike in the middle age group, however, in the older age group, this deterioration continued into the second wave of the Covid-19 pandemic in the winter of 2020/21 (when they were aged 76 to 96) and manifested in an increase of 7.4 per cent points in (very) poor health ratings. This continuing deterioration suggests that the unfavourable change in self-rated health in the oldest age group was due more to age-related and less to pandemic-related deteriorations in health.

Thus, when we look separately at changes in self-rated health for people from different age groups, we find indications that existing age group differences evident in 2014 had widened by the second wave of the Covid-19 pandemic. The growing divergence in subjective health ratings was the result of improvements in self-rated health among the youngest age group on the one hand and deteriorations in self-rated health in the middle and oldest age groups on the other. However, it should be emphasised once again that the deterioration in self-rated health among the oldest age group points to an age-related rather than a pandemic-related development.

5.5 Gender Differences in Changes in Self-Rated Health

Looking at gender differences in trends in self-rated health between 2014, 2017 and 2020/21 (Fig. 5.3), it is clear that women and men did not differ significantly in their baseline levels of self-rated health. That is, women and men in the second half of life felt similarly healthy in 2014. However, gender differences in changes in self-rated health can be observed: Women, but not men, were less likely to report (very) good health in 2017 (a decrease of 5.9 per cent points) and more likely to report moderate health (an increase of 4.8 per cent points) than in 2014, but this deteriorating trend among women did not continue into winter 2020/21. Instead, both women's and men's health ratings remained stable between 2017 and the second wave of the Covid-19 pandemic.

Gender differences in self-rated health thus increased during the observation period, to the disadvantage of women. However, this increasing disparity does not seem to be attributable to the Covid-19 pandemic, as the gender differences in changes in self-rated health were evident between the years 2014 and 2017 but not between 2017 and 2020/21.

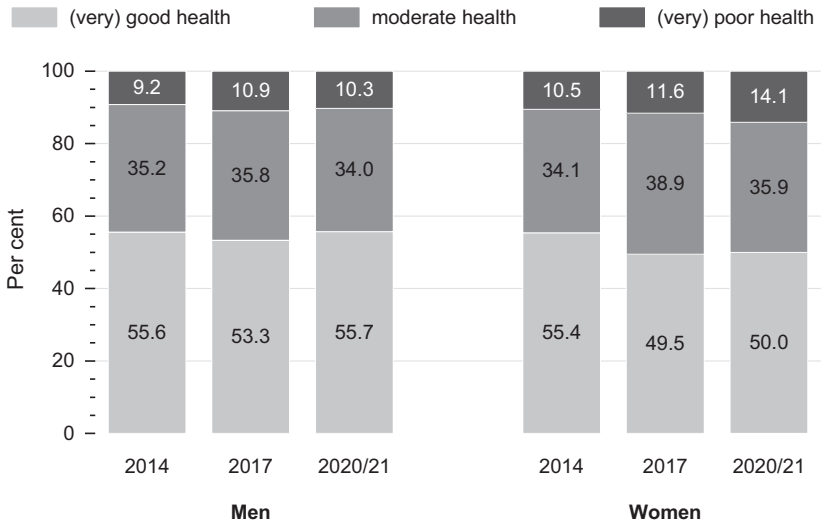

Fig. 5.3 Change in self-rated health, by gender, 2014, 2017 and 2020/21 (in per cent). *Source* DEAS 2014 (n = 4054), DEAS 2017 (n = 4054), DEAS 2020/21 (n = 4054), weighted analyses, rounded estimates. Statistically significant changes between 2014 and 2017, ($p < 0.05$): Decrease in the proportion of women with (very) good self-rated health; increase in the proportion of women with moderate self-rated health. No statistically significant changes between 2017 and 2020/21, ($p < 0.05$). Gender differences in baseline levels in 2014 are not statistically significant ($p < 0.05$)

5.6 Socioeconomic Differences in the Change of Self-Rated Health

Differences in socioeconomic status (SES) play a clear role in subjective health assessments (Fig. 5.4). Compared to people with low or middle SES, people with high SES more often reported (very) good health in 2014. Among people from the highest status group, the proportion of respondents with (very) good health ratings was 67.1 per cent, while only 55.4 per cent of respondents from the middle status group and 43.4 per cent of respondents from the low status group had (very) good health ratings. At the same time, (very) poor health ratings were less commonly reported by people with high SES (7.3 per cent) than among people with low SES (16.4 per cent). But how did the socioeconomic differences develop up to the second wave of the Covid-19 pandemic?

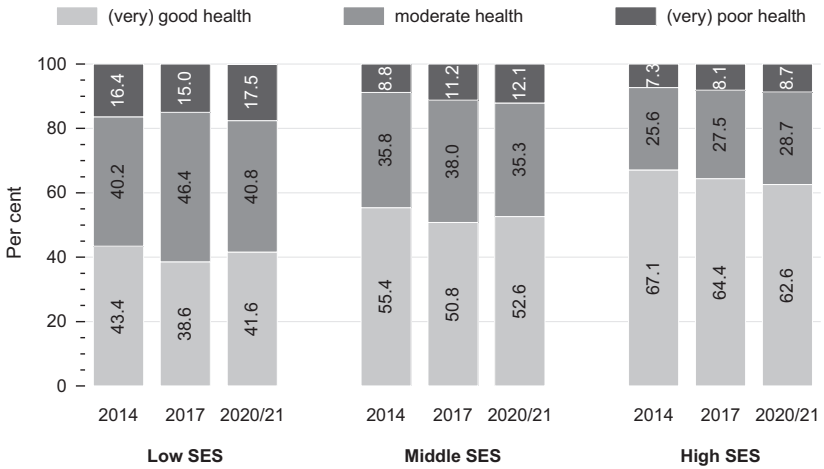

Fig. 5.4 Changes in self-rated health, by socioeconomic status (SES), 2014, 2017 and 2020/21 (in per cent). *Source* DEAS 2014 (n = 4054), DEAS 2017 (n = 4054), DEAS 2020/21 (n = 4054), weighted analyses, rounded estimates. Statistically significant changes between 2014 and 2017, ($p < 0.05$): Decrease in the proportion of people with (very) good self-rated health among people with low and middle socioeconomic status; increase in the proportion of people with moderate self-rated health among people with low socioeconomic status; increase in the proportion of people with (very) poor self-rated health among people with middle socioeconomic status. Statistically significant changes between 2017 and 2020/21, ($p < 0.05$): Decrease in the proportion of people with moderate self-rated health among people with low socioeconomic status. Socioeconomic differences in baseline levels in 2014 are statistically significant ($p < 0.05$) with the following exceptions: Differences between people with low and middle socioeconomic status are not significant regarding moderate health. Differences between persons with medium and high socioeconomic status are not significant regarding (very) poor health

While people with high SES reported stable self-rated health across the survey waves, people with low and middle SES showed a deterioration in their self-rated health between 2014 and 2017. This trend is due to a decrease in (very) good health assessments in both groups (by 4.8 per cent points in the low SES group and by 4.6 per cent points in the middle SES group, respectively). At the same time, there was an increase in moderate health assessments among people with low SES (by 6.2 per cent points) and an increase in (very) poor health assessments among people from the middle SES group (by 2.4 per cent points). This deterioration, however, did not continue into the winter of 2020/2021. This means that during the second wave of the Covid-19 pandemic, similar proportions of

people from the lower and middle SES groups regarded their health as (very) good and (very) poor as in 2017. However, among the low SES group, there was a decrease in the proportion of people with moderate health assessments by 5.6 per cent points.

The findings thus suggest that socioeconomic differences have widened since 2014. However, the growing inequality is due to the socially stratified deterioration in health between 2014 and 2017. In contrast, socioeconomic disparities did not widen in the wake of the Covid-19 pandemic.

5.7 Summary and Conclusion

Contrary to existing concerns about the possible indirect health consequences of the general pandemic situation (Gaertner et al. 2021), such as the threat of the virus, worries about relatives, or the stress of pandemic-containment measures, people in the second half of life have continued to report relatively stable health status data. On the whole, most people did not report feeling less healthy in the winter of 2020/21—that is, in the midst of the second wave of the Covid-19 pandemic—than they did in 2017.

This trend is particularly noteworthy when it is compared with trends between 2014 and 2017, which showed a deterioration in subjective health assessments. Thus, the downward health-status trend halted in the midst of the Covid-19 pandemic in many social groups: among women, among people who were around the retirement-age threshold in 2014, and also among people with low or middle SES. Men and people with high SES, on the other hand, showed no changes in their health assessments across all survey waves. In the youngest age group, there was even a positive trend in the wake of the Covid-19 pandemic. There was only one group of respondents who reported increasingly negative health status data from 2014, through 2017 to 2020/21—the group of oldest respondents, who were between 70 to 90 years old in 2014. However, since this downward trend was observed over all three observation points, it is more likely to be a "normal" ageing trend. And it would likely have emerged in a similar form even without the influence of the Covid-19 pandemic.

Overall, and contrary to previous assumptions, the results indicated that during the Covid-19 pandemic, there was no deterioration in most people's health (Gaertner et al. 2021)—but rather a stabilisation or even improvement in self-rated health. This is striking in view of the unfavourable developmental trends documented up to the summer of 2020 in other health-relevant areas of life, such as social integration, physical activity and mental health, (see chapters "Loneli-

ness increased significantly among people in middle and older adulthood during the Covid-19 pandemic" and "Physical activity during the Covid-19 pandemic. Changes in the frequency of sport and walking among people in the second half of life"; Skoda et al. 2021). The observable resilience in health assessments offers renewed evidence of the astonishing adaptability of personal health assessments.

It is possible that social comparison processes (Cheng et al. 2007) played an important role in self-rated health assessments during the pandemic. The frequent reporting about patients in intensive care units who were severely ill with Covid-19 and portrayals of older people as a frail risk group may have contributed to many people's awareness of how well they were doing—at least in comparison to others—during the Covid-19 pandemic. In the current literature, this dynamic is described as the "Eye of the Hurricane" paradox (Recchi et al. 2020). The core idea is that people who were themselves little affected by the Covid-19 pandemic found themselves in the calm centre of a pandemic hurricane that apparently had the power to endanger everyday life and social interaction. Consequently, people in the "eye of the hurricane" probably perceived their current life situation as better than normal—or at least they did not perceive it as any worse than before.

At the same time, it can be assumed that unfavourable developments in the social, sporting and psychological spheres were of little importance for individuals' evaluations of their own health during the Covid-19 pandemic, because these developments were part of a shared, almost "normal" experience of stress. Studies have also shown, for example, that feelings of loneliness increased in the second half of life across a wide range of social groups—irrespective of age, gender and educational background. (see chapter "Loneliness increased significantly among people in middle and older adulthood during the Covid-19 pandemic").

Together, social comparison and reweighting processes could explain why self-rated health assessments stabilised and why there was a positive trend in the youngest age group. It should be emphasised, however, that this optimistic self-rated health trend may not translate into an equally favourable development in other, more objective health indicators. Instead, this trend most likely reflects the adaptability of self-rated health to the changed living conditions during the pandemic.

But one question remains: why was the favourable self-rated health trend not evident in the group of the oldest respondents? The answer could be that the oldest population group lacked a comparison group that would help to cast their situation in a better light. The epidemiological reality is that old age is one of the biggest empirical risk factors for developing severe Covid-19. And this very fact has been brought to the attention of older adults through all available media and

political channels. So, unlike other social groups, it may have been difficult for the oldest people in the population to maintain a positive health-related self-concept in light of a one-sided portrayal of their group as a particularly vulnerable and frail. It is known that the media dissemination of an overly negative image of older people can promote unfavourable self-perceptions among those concerned (Kessler 2015). In this respect, the often one-sidedly negative portrayals of older people in the Covid-19 pandemic may have contributed to the deterioration of older adults' self-rated health over the entire study period.

Fortunately, however, the present findings allow for a cautious all-clear regarding a possible worsening of socioeconomic inequality in self-rated health, as the gap between the health ratings of people from different status groups did not widen further, at least between 2017 and the second wave of the Covid-19 pandemic. Nevertheless, clear health disadvantages continued to emerge among socioeconomically disadvantaged people.

Conclusion

Overall, the current findings on the development of self-rated health during the Covid-19 pandemic paint a rather optimistic picture: in most population groups, health ratings stabilised, and there was even a trend towards improved self-reported health ratings among people of working age. Socioeconomic differences in health also did not worsen during the Covid-19 pandemic. These findings reflect the considerable adaptability of self-rated health assessments, although social comparison processes may have played a decisive role.

Only among the oldest adults do we see a persistent trend towards deteriorating health ratings. However, this seems to be due to age-related health developments rather than being a side effect of the Covid-19 pandemic.

Despite the rather positive message regarding self-rated health in most populations, it should be emphasised again that the present findings refer to people in the second half of life who had not themselves experienced a coronavirus infection. Significantly worse trends in objective and self-rated health have been reported for people who were directly affected by a coronavirus infection—and especially for those who experienced severe Covid-19 disease (Gamberini et al. 2021). In addition, the current findings cannot represent the health situation of people in care facilities. However, the particularly strict protection measures in nursing homes probably placed a particular burden on this group's health. Hence, the rather optimistic picture of self-rated health should also be interpreted in view of this limited data situation. Finally, note that the findings presented here pertain

to the changes in subjective health assessments that were evident up to the second wave of the Covid-19 pandemic. Further surveys are necessary to uncover the medium- and long-term health consequences of the Covid-19 pandemic for different population groups.

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