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Health and economic inactivity

Initial findings from the 1970 British Cohort Study at Age 51

The rising number of people who are not working or looking for work because of poor health, also known as health-related economic inactivity, is an area of growing policy concern. An estimated 2.8 million people (6.6% of adults aged 16-64) were not working because of their health in early 2024[1], with the highest numbers in the 50-64 age group[2]. Among older adults, poor health is the most common reason for leaving the workforce apart from retirement[3].

Health-related inactivity poses a financial challenge for the UK Government, since having more people out of the workforce due to illness is linked to lower revenue from tax and National Insurance contributions, and greater levels of expenditure from health benefits. While it may sometimes be necessary and beneficial for individuals who are unwell to leave the workforce, work participation also has benefits for people's mental health and economic and social wellbeing[4].

Understanding the impact of long-term health conditions on worklessness is not straightforward. Many people with long-term health conditions can and do remain in work, and those who do eventually become economically inactive due to their health may only do so many years after having become ill. Additionally, people who are already out of work may go on to develop illness.

Given the complex relationship between health and work, longitudinal studies like BCS70 are crucial to gaining insights about how ill-health relates to people's economic activity, since they allow us to observe how employment patterns play out over time. We used data from 7,337 BCS70 participants who completed the age 51 survey to explore how the presence of long-term health conditions in cohort members' forties is related to being out of the workforce due to health reasons at age 51[5].

ABOUT THE DATA

1970 British Cohort Study Age 51 Sweep

The 1970 British Cohort Study (BCS70) is following the lives of around 17,000 people born in England, Scotland and Wales in a single week of 1970. The Age 51 Sweep took place between summer 2021 and January 2024. Over 8,000 study members took part in a 75-minute survey, either online or with an interviewer. Data from this and previous sweeps of BCS70 are available to download from the UK Data Service.

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Key findings

- At age 42, nearly one in three cohort members reported having a physical or mental health condition lasting at least 12 months.
- At the same age, nearly one in five were experiencing poor mental health.
- People with long-term health conditions at age 42 were more likely to not be working due to their health in their early fifties than those without these conditions.
- Those experiencing poor mental health at age 42 were 4.5 percentage points more likely to be out of work due to their health at age 51.
- Those with a history of persistent back pain at age 42 were 3.2 percentage points more likely to not be working due to their health at age 51.

Results

Long-term health conditions at age 42

At age 42, nearly one in three cohort members reported having a longstanding illness or a history of back pain. One in four were living with obesity, one in five were experiencing psychological distress, one in seven reported a history of high blood pressure, and one in 30 had diabetes (Figure 1).

Work at age 51

At age 51, most cohort members were economically active (i.e., working full-time or part-time, or unemployed but looking for work). Nearly 9% reported that they were economically inactive because of health problems (Figure 2).

FIGURE 1: PERCENTAGE OF COHORT MEMBERS WITH SELECTED SELF-REPORTED CHRONIC HEALTH CONDITION AT AGE 42

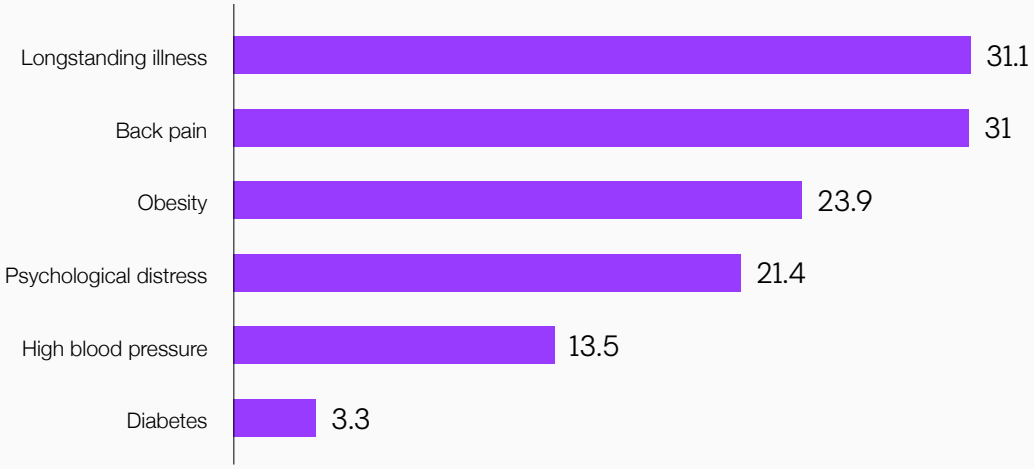
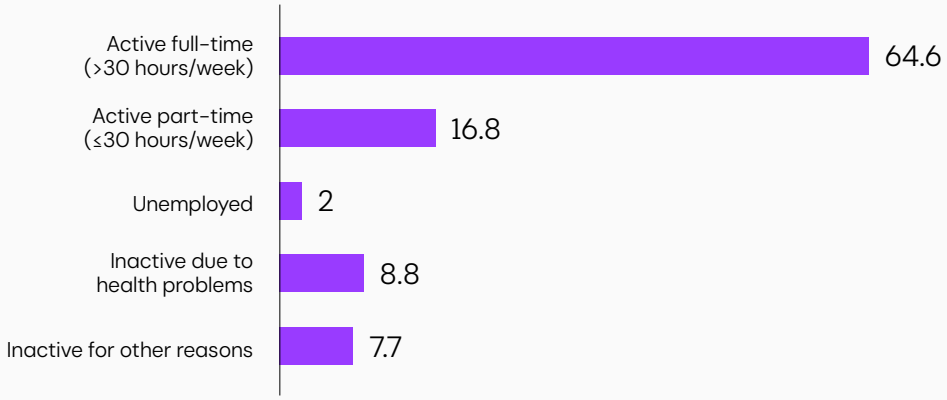


FIGURE 2: PERCENTAGE OF COHORT MEMBERS IN DIFFERENT ECONOMIC ACTIVITY CATEGORIES AT AGE 51



Most people with long-term health conditions at age 42 were in work at age 51. For example, nearly two in three people who were experiencing poor mental health in their early forties were working full-time or part-time. However, those with long-term health conditions were less likely to be employed at age 51 than those without these conditions.

Among those who had experienced poor health at age 42, individuals who remained in work ten years later tended to be more socioeconomically advantaged than those who were no longer working due to health problems (e.g., more likely to be homeowners, and to have higher levels of education and household income).

Definitions

Health-related economic inactivity: Not working and not looking for work because of a health problem.

Longstanding illness: Having a mental or physical health condition lasting or expected to last 12 months or more.

Psychological distress: A measure of mental health. Cohort members are asked a series of questions about symptoms of depression, anxiety and distress. We identify cohort members experiencing psychological distress as those who score above a clinically relevant cut-off point across this series of questions.

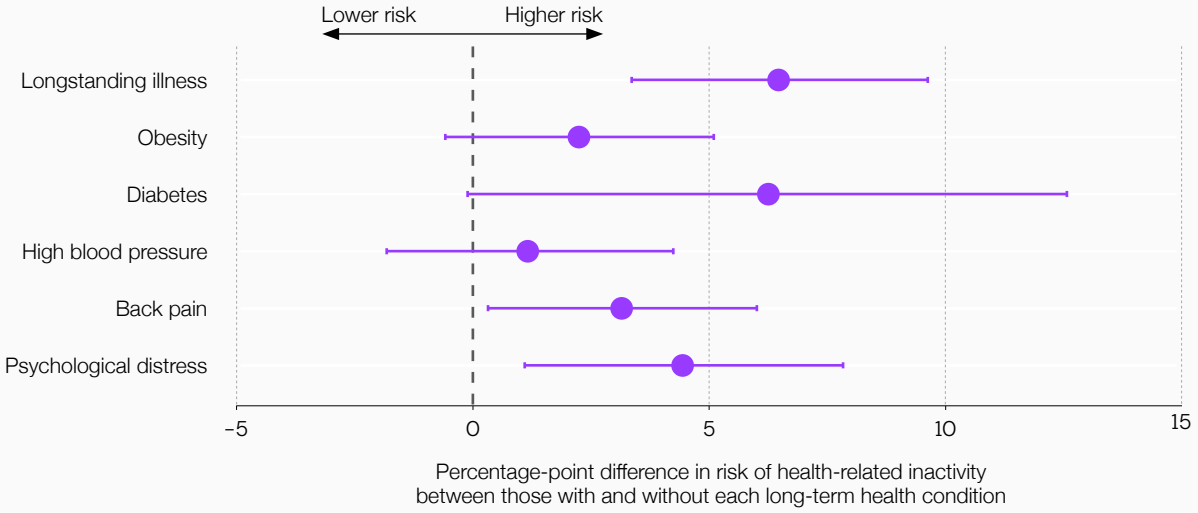
Health at age 42 and work participation a decade later

People with and without long-term conditions differ in other ways that are relevant to their employment. For example, people who had a longstanding illness or were experiencing obesity or mental ill-health at age 42 were more likely to come from socially disadvantaged backgrounds, which could affect their work opportunities for reasons unrelated to their health.

A major strength of BCS70 is that, because cohort members have been followed for several decades and have answered questions on many different areas of their lives, it was possible to account for many of these differences in our analyses (further information under Figure 3 below). Importantly, we were able to include a measure of cohort members' previous economic activity at age 42, meaning that our analyses account for the fact that people with long-term health conditions in their early forties already exhibit different patterns of work from those without these conditions.

Accounting for these characteristics in our analyses reduces the risk of confounding or omitted variable bias, increasing confidence that the observed associations reflect differences linked to long-term health conditions and health-related inactivity rather than other underlying factors.

FIGURE 3: RISK OF NOT WORKING BECAUSE OF HEALTH PROBLEMS AT 51 FOR THOSE WITH POOR HEALTH AT AGE 42



Models accounted for sex and father's social class when cohort members were born, cognitive ability at age 10, and region of residence, educational attainment, household income, type of occupation, and marital/partnership status and whether any children were in the household at age 42, and the age at which the outcome (economic inactivity) was measured.

Once these differences were accounted for, individuals with long-term health conditions at age 42 were still more likely to be inactive due to their health a decade later, except for high blood pressure. For example, people who had a longstanding illness had a 6.5 percentage point (ppt) higher risk of being economically inactive due to their health. This was also the case for those with a history of back pain (3.2 ppt higher risk), and those who were experiencing psychological distress (4.5 ppt higher risk). Estimates for diabetes are less precise because the number of people with diabetes at age 42 in BCS70 was relatively small.

This is an **observational study**. This means that researchers did not control what the participants were exposed to, instead they observed what happened to the different groups of people without intervening. The authors were able to use very detailed data to account for a wide range of factors that may have influenced the links between health at age 42 and economic inactivity at age 51. However, it would be impossible to rule out every influence with certainty.

Considerations for policymaking

The prevalence of chronic health conditions, including mental ill-health, was already substantial at age 42 – relatively early in midlife. Preventative efforts are needed to reduce the prevalence of midlife ill-health in future generations, and consequently the size of the population at risk of transitioning to health-related inactivity. Evidence from the British birth cohorts has demonstrated the importance of good health in childhood for a wide range of adult outcomes, including health, income, and employment[6,7], highlighting the value of preventative efforts that begin early in life.

The British birth cohorts and other population representative datasets have also shown that the prevalence of several chronic health conditions, including obesity, poor mental health, and diabetes, is higher in more recently born cohorts when compared at the same age, a phenomenon referred to as a "generational health drift"[8,9,10,11]. Assuming that all differences between those with and without long-term health problems have been accounted for, these findings suggest that further efforts are needed to weaken the link between long-term health conditions and health-related inactivity. This may involve interventions to improve the management of chronic health conditions once they are diagnosed, including through better integration of occupational health and healthcare services, and targeting support for the growing number of working age-adults living with long-term conditions to remain in, or return to, work.

Opportunities for future research

BCS70 offers further opportunities to understand the relationship between health and work from a lifecourse perspective. The study has repeatedly collected detailed information on cohort members' economic activity throughout life, and month-by-month employment histories are available to researchers. The richness and variety of the lifecourse data collected by BCS70 also offers opportunities to better understand the pathways that link health and employment, for instance by exploring what factors increase the likelihood that an individual experiencing a long-term health problem can remain in work.

About the 1970 British Cohort Study

The 1970 British Cohort Study (BCS70) is following the lives of around 17,000 people born in England, Scotland and Wales in a single week of 1970. Over the course of participants' lives, BCS70 has collected information on health, physical, educational and social development, and economic circumstances among other factors. The study is managed by the UCL Centre for Longitudinal Studies and funded by the Economic and Social Research Council.

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