



## DEPRESSION AND DEPRESSIVE SYMPTOMS AS RISK FACTORS OF LABOUR DEACTIVATION AND EARLY OR DISABILITY RETIREMENT IN ECONOMICALLY ACTIVE ADULTS IN DIFFERENT AGE GROUPS

## DEPRESJA I ZABURZENIA DEPRESYJNE JAKO CZYNNIK RYZYKA ZAPRZESTANIA PRACY ZAWODOWEJ WŚRÓD AKTYWNYCH ZAWODOWO OSÓB Z RÓŻNYCH GRUP WIEKOWYCH

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### Abstract

**Purpose:** Over the recent years, the number of people over 54 years of age, who decide to make use of early retirement, has systematically increased. Economic inactivation is also an emerging problem in the group of younger adults. Depression or depressive symptoms should be taken into consideration in analysing variables that may play a role in the decisional process regarding occupational activities. The aim of the present work is to summarise the role of depression or depressive symptoms in the process of decision-making to continue occupational activities or to quit them.

**Review:** The authors listed and discussed the most recent and representative surveys and studies regarding causes of retirement, concentrating especially on depression and depressive symptoms. The studies summarised here include the Health and Retirement Study, English Longitudinal Study of Ageing, Survey of Health, Ageing and Retirement in Europe and WHO's Study on Global Ageing and Adult Health. It has been shown, that prevalence of depressive symptoms of different severity in professionally active people may range from 6% to 32%. Depressive symptoms significantly increase the chance for retirement.

**Conclusions:** Depressive disorders can affect people in all age categories and are one of the main cause of early disability retirement or early retirement tendencies. It is important to consider depressive disorders in policies supporting labour force participation.

**Key words:** depression, retirement, resignation from work.

### Streszczenie

**Cel:** W ciągu ostatnich lat systematycznie zwiększa się liczba osób w wieku powyżej 54 r. ż., które decydują się na wcześniejszą emeryturę. Zaprzestanie wykonywania zawodu, a przez to inaktywacja ekonomiczna, stanowi również nowy problem w grupie młodszych dorosłych. W analizie zmiennych, które mogą odgrywać rolę w procesie decyzyjnym dotyczącym aktywności zawodowej, należy wziąć pod uwagę zaburzenia psychiczne, w tym zwłaszcza depresję lub zaburzenia depresyjne. Celem niniejszej pracy jest podsumowanie roli depresji lub objawów depresyjnych w procesie decyzyjnym, dotyczącym zaprzestania lub kontynuacji aktywności zawodowej.

**Poglądy:** Autorzy podsumowali najnowsze, reprezentatywne badania, dotyczące przyczyn podjęcia decyzji o zaprzestaniu wykonywania pracy zawodowej, koncentrujące się przede wszystkim na roli depresji i objawów depresyjnych, np.: *The Health and Retirement Study*, *English Longitudinal Study of Ageing*, *Survey of Health, Ageing and Retirement in Europe* oraz *WHO's Study on Global Ageing and Adult Health*. Wykazano, że częstość występowania objawów depresyjnych o różnym nasileniu u osób aktywnych zawodowo może wynosić od 6% do 32%, a depresja znacznie zwiększa szansę na zaprzestanie pracy zawodowej.

**Wnioski:** Zaburzenia depresyjne dotyczą osób w każdym wieku i są jedną z głównych przyczyn rezygnacji z pracy, przejścia na wcześniejszą emeryturę lub rozważania takiej możliwości. Ważne jest zatem uwzględnianie zaburzeń depresyjnych w programach mających na celu wspieranie uczestnictwa w rynku pracy.

**Słowa kluczowe:** depresja, renta, rezygnacja z pracy zawodowej.

## INTRODUCTION

Over the recent years, the proportion of people over 54 years of age, who decide to make use of early retirement, has systematically increased within the European Union. However, economic inactivation has shown to be an emerging problem also in younger adults. The reasons for this worrisome trend include both psychological and sociodemographic factors. Depression or depressive symptoms should be taken into consideration in analysing variables that may play a role in decisional process regarding occupational activities.

## EMPLOYMENT PATTERNS

According to the OECD (Organization for Economic Co-operation and Development) reports, employment rate according to age in European Union met 34.2% (29.5% in Poland) in people aged 15-24 (those entering the labour market following education), 79.3% (81.2% in Poland) in people aged 25-54 (those in their prime working lives) and 56.3% (47.9% in Poland) in people aged 55-64 [1]. It may suggest that a large proportion of young adults (aged 15-24) do not take part in the labour market, which is probably due to the fact that most of them are still attending school, college, university, other higher education establishment or training. Moreover, one study from New Zealand has shown that despite being employed, over one-third of 15-24-year olds are leaving their jobs to continue their education or participate in training, or because their temporary employment contract expired [2]. Nevertheless, there is a group of young people, who are neither employed nor involved in education or training. This group includes both, people who are unemployed and those who are considered economically inactive. According to the Eurostat data of 2016, only 6.1% of the EU young people aged 15-19 were categorised as being neither employed nor involved in education or training, but this proportion is significantly increasing in group of people aged 20-34 where it reaches 18.3% (16.7% for people aged 20-24, 18.8% for those aged 25-29, and 19.1% for those aged 30-34) [3]. In this group, 42.1%

of young men and 69.2% young women are economically inactive [3].

There are various reasons for economic inactivation among young people. The Economic Policy Centre at the Ulster University in North Ireland developed the working paper to provide an overview of recent data on this worrisome trend [4]. According to the Irish study, large proportion of the population is economically inactive due to long term sickness or disability (sickness/disability benefit recipients) and due to family/home responsibilities (mostly childcare) [4]. In the group of long-term disabled people aged 16-64, 16% are in the age of 16-34 years. Family reasons seem to be completely understandable, but health conditions which prevent young people from being economically active may include other various physical impairment conditions and cognitive or psychiatric problems. Interestingly, mental illness is the dominant reason of economic inactivation prevailing of both young and older people [4].

The older population is an important factor in creating the labour market economic deactivation, which not only determines current labour needs, but also increases pension and social costs. The biggest loss of employees is noticeable in groups of women aged above 54 and men above 59 years, due to the early retirement option [5].

According to the report of the Polish Ministry of Labour and Social Policy, in 2016 work activity of people aged 50+ reached 34.6%, which means that only one in three people in this group was professionally active [6]. In the group of people aged 50-64, this percentage is higher and reaches 58.4%, but still it means that a half of people in near-retirement age are economically inactive [6]. Work activity of people aged 50-64 in Poland was much lower than the one observed in other European Union countries, i.e. 58.4% vs 69%, respectively (the index was lower only in Croatia, Romania, Malta, Greece and Slovenia). Moreover, the percentage of professionally active people aged 55-64 is also lower in Poland (49.9%), comparing to the mean percentage 59.6% in the UE [7]. The reasons for this professional deactivation of people in near-retirement age include both economic and non-economic factors. It seems that due to increasing needs

for employees, the employers' tendencies to reduce work-force among people in near-retirement age is not going to be a significant problem. More likely, other factors will emerge, such as financial benefits (e.g. a possibility to receive a pension and to continue working in a limited extent) personal issues (e.g. family responsibilities) and mainly health problems (physical and mental).

## DEPRESSION AS A MAJOR REASON FOR ECONOMIC INACTIVATION

According to several surveys, mental disorders (especially depression) might be the prevailing factor responsible for increasing the number of people with disability or the ones who use sick leaves. Moreover, it can be the main reason for earlier retirement, changing or quitting job mainly among people aged 50+.

The foundations of recent studies were made by the Health and Retirement Study (HRS) – a longitudinal survey of a representative sample of Americans aged over 50 (approximately 20,000 respondents interviewed every two years) conducted by the Survey Research Centre (SCR) at the Institute for Social Research (ISR) at the University of Michigan. The aim of this study was to examine how older adults' health status, apart from social, economic and psychological factors, interacts with retirement decision [8]. Similar studies were also carried out in other countries, such as the English Longitudinal Study of Ageing (ELSA) [9], the Survey of Health, Ageing and Retirement in Europe (SHARE) [10] or the WHO's Study on Global Ageing and Adult Health (SAGE) [11].

Designed on the basis of HRS, English ELSA study covering the 12-year period (from 2002-2003 to 2014-2015) was conducted to establish determinants of social exclusion or economic disadvantage in people aged 50 or older. The study revealed the highest CES-D score among people who retire involuntarily (health reasons, redundancy or inability to find another job) and evidenced a strong role of depression in all-cause mortality; it explained approximately 15% of the association between socio-economic measures and all-cause mortality [9]. The Survey of Health, Ageing and Retirement in Europe (SHARE) was a multidisciplinary and cross-national panel database of data on health status (physical and mental, health care, disability, morbidity, mortality), socio-economic conditions (income security, personal wealth, education), social arrangements (partnership, family, social networks, social support) and family status of more than 120,000 individuals aged 50 or over from 27 European countries and Israel. In the context of early retirement, the study revealed that depression and early economic inactivation are linked bidirectionally; depression is frequently a reason for early retirement and retirement itself induces the onset of depression symptoms [10].

The Study on Global AGEing and Adult Health (SAGE) is run by the World Health Organization and its objective is to collect comprehensive longitudinal data regarding health and well-being of adult populations and the ageing process across different countries. It revealed that the rate of depression among population over 50 of SAGE countries' ranges from 1.1% in China to 13.6% in India, and that there is a correlation between mental health and retirement. It seems that mental health is one of the main reasons for the exit from the labour force [11].

In another study, Doshi *et al.* (2008) analysed the data of 3568 employees aged 53-58, that were collected starting from 1994 till 2002, and repeated every 2 years within that period. He measured the presence of active depression or depressive symptoms (using the Centre for Epidemiological Studies Depression scale, CES-D) and the tendency towards a transition to retirement; other factors were also included, such as age, race, education, marital status and medical conditions [12]. As predicted, the presence of active depression significantly increased the risk of retirement in late middle-aged men and women. Moreover, in many cases, the job-related stress itself was responsible for triggering the onset of the depressive disorder and therefore accelerated a decision of early retirement [12]. Similar conclusions were drawn by Lunau *et al.* who analysed data from three longitudinal studies (SHARE, HRS, ELSA) that included 5650 men and women (aged 50-64 and reporting to be doing paid jobs of different kind) in 13 countries [13]. Stress at work due to poor working conditions, low opportunities for promotion, further education, and workplace training, high-income inequality or low unemployment benefits after losing the job, as well as depressive symptoms were measured. In conclusion, the authors emphasised that work stress was associated with increased risk of depressive symptoms among older employees, and therefore may have a contribution to early retirement in this economically active population [13].

Depression or depressive symptoms may affect work ability in two different ways: they may influence cognitive functioning and affect social interactions in work environment (and therefore increase work inactivity). Moreover, physical impairment (another reason of economic inactivity) may induce depressive symptoms and exacerbate functional limitations. Kwon and Park used prospective data from 6010 adults (aged 51-64), which were collected over a 12-year period from the Health and Retirement Study, to establish trajectories of physical and mental health issues in late middle age population, in the context of its socioeconomic activity [14]. They identified five patterns of health status changes during the study course: relatively healthy, persistently high comorbid, moderately improving, steadily deteriorating and steeply deteriorating; and discovered that, regardless the pattern, the risk of decline in physical and mental health (especially depressive symptoms) is increasing in

late middle age, earlier and faster in the population who experienced early life disadvantages [14].

Several national studies representing different populations, education patterns, local economic status or work culture, raised the issue of work ability and factors associated with earlier economic inactivation. Danish cross-sectional study on 4041 eldercare employees or employees who care for the elderly (aged >45 years) assessed whether depressive symptoms are associated with early retirement tendencies [15]. The authors of this study measured depressive symptoms using the Major Depression Inventory and apart from identifying the intensity of depressive symptoms (severe, moderately severe, moderate, mild and none), they observed the changes in the level of depressive symptoms (worsened, improved, unaffected) and their influence on early retirement intentions or on decision to use disability pension. The study showed that moderately severe, moderate or mild depressive symptoms were present in 6%, 13% and 32% of all responders. The risk of early retirement was higher in the group of people below 62 years of age and in the group of people aged 62-64 with severe depressive symptoms. Moreover, deterioration of depressive symptoms over time was associated with higher chance of early retirement or using disability pension [15]. As in previously mentioned study, this analysis identified also other factors, that could push responders toward early retirement, such as physical health, socioeconomic status, and spouses employment status.

Godinho *et al.* followed 696 university technical-administrative employees in Brazil and analysed the factors associated with long-term sickness absence and early retirement in the group of higher education institution employees in the mean age of 45 years [16]. Various variables were included, such as age, race, marital status, sex, education, family income, weekly working hours, overall health and dental health status, smoking status, stressors of work and, of course, the signs and symptoms of depression. Next to the level of education and life habits (such as sedentary lifestyle or alcohol addiction), health conditions (poor self-assessment of general health and dental status, signs and symptoms of depression) were found to be significantly associated with reduced work ability [16].

Paunio *et al.* examined symptoms of depression secondary specific to poor quality of sleep and sleep disorders in 12063 individuals – participants of The Finnish Twin Cohort – and assessed the risk of disability retirement due to depression [17]. They discovered that chronic sleep problems increase 2.5 times the risk for depression and this risk is even higher if sleep quality deteriorates over time. The causative mechanism is complex and appears to be as-

sociated with the impact of sleep on the processing of emotional information [18]. Moreover, the authors found that sleep disorders increase the risk of disability retirement due to depression almost 3 times (even when adjusted for the effect of stressful life, poor somatic health, smoking and alcohol use) [17]. The study included data of people in the mean age of 28.6 years (range 18-45 at the beginning of observation) – the population which is responsible for creating the labour market. Therefore, the results suggest that depression might be one of the reasons for economic inactivity among young people.

Disability retirement among young employees is an increasing problem affecting both the labour market and public health issues as it is responsible for major loss of working time. Approximately one in four young adults has a chronic condition, although it seems that mental disorders affect the work ability to the greatest extent [19]. In another Finnish study, 12.5% of 30-44-year old people have been diagnosed with depressive disorders [20], and in Swedish report by Molarius, the prevalence of moderate or extreme anxiety and depressive symptoms among 18-34-year olds was even higher and reached 40% among women and 30% among men [21]. In 2016, Sumanen *et al.* published a report on the 12-year observation of differences in work ability, short sickness absence and disability retirement (attributable to any cause as well as to mental causes) among young people aged 18-34 [22]. Although the percentage of young adults (aged 25-34) who retired due to disability during the study was relatively small (0.7%); 70% of these retirements were due to mental disorders. In their final conclusion, the authors stated that mental and behavioural disorders are among the main causes of disability retirement among young adults in Finland, which was consistent with data collected in other European countries, such as Denmark, Sweden, Norway, Iceland, the Netherlands and the UK [22].

## CONCLUSIONS

Rising economic inactivity both among young adults and a near-retirement group of employees is a matter of concern, especially in the context of increasing demands of the labour market. Increasing proportion of economically inactive people due to health problems, in particular, mental health problems, is even more disturbing as depressive disorders affect people in all age categories and are one of the main cause of early disability retirement or early retirement tendencies. It is important to consider depressive disorders in policies supporting the labour force participation.



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## Conflict of interest/Konflikt interesu

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