Lodz Economics Working Papers

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1/2024

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Abstract

The prevalence of mental conditions is high and tends to increase in the population and for young people, in particular, which indicates that the problem of mental health in the workforce will be growing at a fast pace. The cost generated by the health issues of the economically active, which is already alarmingly immense, will increase in the long term. Hence, this paper aims to investigate the complex relationship between mental health and work as well as to assess the detrimental socioeconomic consequences of mental disorders in the workforce to various sets of market participants.

The results indicate that (1) workers with mental conditions impair productivity and the work environment impacts mental health; (2) mental health problems generate enormous costs for the economy and society, employers and employees; (3) the indirect burden of mental disorders vastly outweighs the direct cost – total cost of mental conditions to the global economy will reach US$ 6 trillion by 2030, i.e. more than cancer, diabetes and chronic respiratory disease combined.

It seems evident that addressing the mental health of the labour force in the workplace and, broader, in society is essential for improving productivity and reducing the economic burden associated with mental health disorders.

Keywords: mental health; labour market; socioeconomic burden of disease; cost of mental disorders; health economics

JEL: I15, I18, J24, J28

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1. Introduction

Mental health and well-being have become an alarming issue in recent years. As assessed by the World Health Organization (WHO), over 12%, that is almost one billion, of the global population lives with a mental illness. (WHO, 2022b) As indicated by the Global Burden of Disease study (GBD), mental disorders are chronic condition with the most immense disease burden (i.e. 32% of total number of years lived with disability; YLD), responsible for a comparable proportion of disability-adjusted life years (DALY) as cardiovascular and circulatory diseases (around 13% of DALYs). (GBD, 2022, Schofield et al., 2022) Forecasts indicate that by 2030, the global burden of mental conditions should rise to US$ 6.0 trillion, and two-thirds will be attributed to disability-induced lost productivity. (Dewa, 2017)

The prevalence of mental disorders is lower for the general population than for the workforce (labour force or economically active population or active population that is employed (employees and self-employed) and unemployed people (Eurostat Glossary)) – 15%. Since almost 60% of the global population is economically active, the burden of poor mental health hinders the livelihood of employees, the situation of employers, the economy, and society. In consequence, an estimated 12 billion workdays are lost globally each year due to depression and anxiety alone, resulting annually in US$1 trillion in forgone productivity. (Birk et al., 2018, WHO, 2022c)

The mental issues of the workforce generate a burden directly from the private and public medical expenditures on treatment and mental health programs. The indirect burden encompasses primarily societal and economic costs of untreated mental health conditions, lost income, the reduction of productivity by absenteeism (i.e. both authorised sick or medical leave and unauthorised absences from work) and presenteeism (i.e. attending work while unwell), premature mortality, and premature leaving the labour market and limiting time of work. The indirect factor is much more challenging to recognise and quantify than the direct component. Thus, it is often neglected or underestimated in studies and policies. Nevertheless, existing data indicate that the indirect and intangible costs constitute at least half the mental condition burden. (Lawson et al. 2022, WHO, 2022a)

In Poland, for instance, around 15% of the population is burdened with depression, and over 80% of them are in the working age group of 30–59-year-olds. While depression is treatable, 75% of cured of depression are bound to relapse in the first two years. Depressive disorders are among the top 10 causes of the highest costs for disability benefits in Poland. Moreover, depression is annually responsible for 5.4 million sick leave days, almost 25 thousand years of lost productivity mainly due to absenteeism, but also a 20% efficiency

reduction while at work. The overall burden of mental conditions on the Polish economy is estimated to be as high as 2.6 billion PLN (US $0.64 billion) per year. (Drapała et al. 2020)

While the awareness of medical and economic aspects of mental disorders has been slowly rising, few studies focus on the multidimensional aspects of mental health of the labour force. The economically active population is the main drive of any economy through the production it generates and taxes it contributes to the national and regional budgets. Thus, this paper aims to investigate the complex relationship between mental health and work as well as to assess the detrimental socioeconomic consequences of mental disorders in the workforce and the cost distribution among various sets of market participants. The research is carried out through an in-depth literature review of the determinants and consequences of mental disorders and statistical data analysis. The paper is structured as follows. Section 2 examines the bidirectional relationship between mental health and work. Section 3 illustrates the social and economic burden of mental disorders on various sets of economic entities: the economy, employers, and individuals. The final section highlights the conclusions and recommendations.

2. Mental health and work

The relationship between mental health and work is complex and multifaceted. Two main avenues of causality can be distinguished. Firstly, employees with preexisting mental disorders constitute a substantial share of the workforce, and their health may impact both working efficiency and employment status. Secondly and adversely, the environment at the workplace, reflecting both the organisation's culture and broader social context, is considered a significant determinant of mental health and well-being. Also, the lack of employment can affect an individual's psychosocial circumstances.

2.1 Employees with mental conditions

Firstly, to assess the two-way relationship between work and mental illnesses, it is fundamental to understand the leading mental health issues plaguing the labour force. Both among the population and workforce, common mental (health) disorders (CMDs), including depression and anxiety disorders (i.a., social anxiety disorder, generalised anxiety disorder – GAD, panic disorder, phobias, obsessive-compulsive disorder –OCD, and post-traumatic stress disorder – PTSD) are the most prevalent. (National Collaborating Centre for Mental Health, 2011) CMDs are significant causes of deteriorating health, leading to lost productivity in the workplace through both absenteeism and presenteeism. (Bubonya et al., 2017, de Oliveira et al., 2023) On the other hand, severe mental illness (SMI), including psychotic disorders, bipolar

disorder but also highly impairing cases of depression, anxiety, eating and personality disorders, tend to cause more frequent and longer hospitalisations and comorbidity with physical conditions as well as disability than CMDs. Hence, SMIs are much more devastating to employment and productivity. A share of CMDs can worsen to SMI due to a lack of proper mental healthcare and prolonged exposure to psychosocial risks at the workplace. (Evans et al., 2016, Launders et al., 2022) The possibility of transition from common to more severe symptoms is worrisome as the work environment and fear of stigma may be some of the causes that only around 15% of those experiencing a mental condition end up seeing a doctor. In particular, major depression, which may be perceived as SMI, has an estimated prevalence of 2% - 4% for the total adult population and workforce alike. Studies indicate that depression-related impairment of work affected more employees, lasted longer, and had a higher recurrence rate than other mental disorders. In consequence, depression has been found to be the leading contributor to absence and work loss. In fact, its effects outweigh the cost of almost all other chronic medical illnesses. (Jeon & Kim, 2018)

Job burnout is another rising mental problem with rapidly growing prevalence among the labour force. Burnout is defined as an occupational phenomenon caused by chronic workplace stress that has not been successfully managed. The symptoms of burnout include lack of energy and exhaustion, negativism and detachment from one's job, and subsequent reduction of professional productivity. (WHO, 2019) Studies indicate that up to 77% of employees may experience burnout at their current job, with (1) lack of support and recognition from superiors, (2) unrealistic deadlines and result expectations, and (3) consistently working long hours and weekends being the leading contributors. 91% of workers notice that burnout negatively impacts their work quality. Young employees are much more likely to experience burnout – with a prevalence of 84% for millennials and 50% declaring they have resigned previously due to burnout (compared to 42% in the total economically active population). (Deloitte, 2018) An elevated prevalence of burnout has been noticed in law enforcement officers, health specialists, financial workers, and teachers. From an organisational perspective, burnout impacts work productivity, satisfaction, and staff turnover. Employees inflicted with it often experience, to some degree, emotional exhaustion, personality annihilation, and diminished self-value. (Khalid et al., 2020)

Chronic stress is also a common issue in the workforce. It can be perceived as a cause of mental issues but also as an effect – a medical problem, though not necessarily a disease, with cognitive, emotional, physical and behavioural symptoms including insomnia, sleepiness, low energy, lack of focus, change in appetite, change in behaviours and emotional response,

emotional withdrawal, physical pain. Chronic stress may result in illnesses, for instance, hypertension, heart disease, obesity, diabetes, and arthritis, with subsequent adverse job-related outcomes as well as job burnout. (Chronic Streess Factsheet) Studies of chronic stress prevalence show alarming results. Around 18% of employees experience stress and frustration daily, 32% a few times a week and another 15% once a week. (Deloitte, 2018) 24% of employees cannot manage stress and pressure in the workplace. Pressure or stress and resultant poor mental health cause 20% of workers' medical leaves. Almost half of the employees declare that their company lacks procedures to identify signs of chronic stress and prevent job burnout. (The Burnout Report 2024, 2024)

Having recognised the most prevalent mental problems in the workforce, understanding the consequences of these conditions on employment is vital. Among workers with CMDs, the leading causes of absenteeism due to mental issues are high work pressure, poor work relationships, unhelpful thoughts and feelings, and ineffective coping behaviours. Additionally, it has been noticed that the length of sick leave due to mental conditions influenced worker's attitudes while returning to work (RTW), impacting work efficiency and quality. Employees after short leave were more likely to report favourable working conditions and proactive coping behaviours, while long-term absence corresponded with more reactive coping behaviours and job dissatisfaction. (Joosen et al., 2022, Stansfeld et al., 2016)

In the case of SMIs, for instance, bipolar disorder, with a global prevalence of 1%, around 50% of affected do not have permanent employment. A survey study indicated that most ill consider working routine and environment crucial for mental well-being and job productivity. In particular, night work and stress tend to cause relapses, while working regular hours help sustain balance. All respondents emphasise the need to destigmatise the disease and introduce mental illness-specific organisational support systems. (Marion-Paris et al., 2023)

People with diagnosed mental conditions are much more likely to be unemployed, and the chances of joblessness increase with the severity of the illness while the odds of re-employment decline. Thus, workers with psychosocial issues are often faced with the dilemma of whether to disclose their condition or not. Disclosure may lead to stigmatisation and discrimination. On the other hand, non-disclosure disqualifies an employee from benefiting from facilitations dedicated to those with mental conditions (e.g. modification to workplace and schedule, RTW programmes) if available at the workplace. Unfortunately, studies indicate that both disclosure and non-disclosure decisions can lead to job loss. (Brouwers, 2020, Tübbicke & Schiele, 2024, WHO & ILO, 2022) Interestingly, the co-workers' responses to the mentally ill tend to vary depending on the form of disclosure. For instance, downplaying one's mental

disorder lessens the supportive reactions. (Barth & Wessel, 2022) For SMIs, younger employees and those with less self-stigma have higher odds of illness disclosure at work. Longer job tenure and administrative support are also stimuli of mental health admission. It has been found that disclosure of SMI positively correlates with odds of gainful employment. (Baldwin et al., 2023)

As proven, the impact of mental health on work is irrefutable. However, the relation is also complex and heterogeneous across demographic groups, occupations, and severity of mental disorders.

2.2 Workplace environment as a determinant of mental health

Research has shown that working conditions are associated with both presenteeism and absenteeism and are very important in assessing reduced productivity at work, particularly for employees with good mental health. Nevertheless, workers reporting poor mental health have around 5% higher absenteeism rates than those in good mental health. (Bubonya et al., 2017) Psychosocial stressors in the workplace, in particular low rewards, effort-reward imbalance, extensive workload, and low job control, tend to elevate the risk of medical leave due to a diagnosed mental disorder. (Duchaine et al., 2020) The International Labour Organization (ILO) recognises some negative factors of job content or work schedule, specific characteristics of the workplace, or opportunities for career development as psychosocial risks that constitute an element of an unsafe working environment. These threats may impair the mental health of the employees but can also lead to or intensify physical conditions (e.g. stroke and ischaemic heart disease). Although psychosocial risk factors are found in all industries, the work situations typical of certain occupations and circumstances tend to increase the chances of experiencing them. For instance, any employment associated with high emotional burden or exposure to potentially traumatic events like health and emergency work; low-paid, unrewarding or insecure jobs, or working in isolation; working in an informal economy with lacking legal protection from unsafe working conditions, overwork, discrimination, etc. tend to increase workers' exposure to psychosocial risks hindering mental health. (WHO & ILO, 2022)

Among the work-related risks stress, mobbing, and stigma are considered particularly common and harmful.

The problem of stress in the context of work environment, or simply workplace or work stress, is understood as the influence of psychological experiences and demands (i.e. stressors) on an employee's short- and long-term mental and physical health. While some stress levels may improve work efficiency and innovativeness, excessive and continuous stressful stimuli or

distress tend to diminish productivity and negatively impact health. Individual characteristics, such as personality and resilience, significantly influence what is considered a harmful stress level and the extent of hazardous effects caused by distress. Some studies show that up to 76% of employees feel moderate and high stress levels at work, 45% experience it daily and 35% recognise the negative effect of stress on their health. Thus, the prevalence of work stress is disturbingly high and appears to increase over time. Moreover, the frequency of work stress is the greatest among younger employees (under 30 years of age). The primary source of workplace stress is workload. Still, other significant factors are relationships with superiors, co-workers and customers, work-private life imbalance, and lack of administrative support. (Hasudungan & Mustika, 2024, Jacobs et al., 2018, Shahid et al., 2012) Furthermore, long-lasting work stress can be perceived as chronic stress and has been established as a significant contributor to job burnout. (Khalid et al., 2020) Studies show that lower levels of job satisfaction, particularly among young employees, may be caused by work stress and lead to depressive and anxiety symptoms. (Juraś-Darowny et al., 2023)

Mobbing is an active or passive behaviour related to a worker or directed against them, characterised by persistent and prolonged harassment or intimidation of that person. It may take the form of humiliation, ridicule or isolation by superiors or co-workers that causes the victim to underestimate their professional ability or suitability. Mobbing is possible for criminal and civil liability. (Business in Poland, 2022) The precise definition of mobbing may differ between jurisdictions, as well as the description of similar or intersecting phenomena such as work bullying, non-physical and non-sexual abuse, violence or harassment. The prevalence of these negative psychosocial behaviours is very high around the world and constitutes a significant problem in the workplace. For instance, 30% of Korean workers reported mobbing. 45% of Japanese employees were subjected to superiors' power harassment. In the United Kingdom (UK), over 20% of healthcare and university workers reported some form of bullying or harassment. In the United States (US), 27% experienced abuse in the workplace in their lifetime, while other studies indicate the frequency of mobbing at 50% of adult workers. In Europe, 16% of employees declared being victims of adverse social behaviours in the previous year, with some estimates indicating mobbing between 5% and 30%. In Hungary, almost 50% of workers were subjected to some offensive behaviour, with 11% reporting weekly or daily harassment and higher prevalence among female and young (18-29 years of age) employees compared to men and older workers. (Ayhan & Tatar, 2024, ILO, 2020, Szusecki et al., 2023) In the context of sustainable human resource management, mobbing is a pathological workplace phenomenon that negatively affects job efficiency and workers' mental health, leading to

depression or PTSD. (Baran Tatar & Yüksel, 2019, Piri et al., 2024, Pytel-Kopczyńska & Oleksiak, 2022)

Stigma and discrimination due to preexisting psychosocial problems and resultant absenteeism are elements of a vicious circle, further impairing the mental health of those who are already mentally vulnerable. Studies have shown that both actual and anticipated stigmatisation lead to decreased well-being, increased absenteeism, and incline presenteeism, which result in reduced productivity. (Berry et al., 2021, Fox et al., 2016) Stigma and discrimination may lead to job loss or failure in getting hired, both due to external decisions of managers and self-sabotage (or self-stigma) by low self-esteem, insufficient motivation at work or finding employment. Fear of stigmatisation is a significant barrier to entering healthcare. Untreated mental conditions tend to cause a deterioration of health and lead to adverse occupational outcomes, such as prolonged sick leave or job loss. (Brouwers, 2020)

While stressors at the workplace can adversely impact one's mental health, unemployment may also cause a heavy psychosocial burden. Unemployment is associated with lower self-esteem, a higher risk of psychological distress and mental problems, including anxiety, mood disorders, substance abuse or suicidal behaviour. Additionally, lack of employment may cause stigmatisation by society and the working population. Males and young people are at elevated risk of adverse psychological problems due to joblessness. (Álvaro et al., 2019, Reissner et al., 2016, Takahashi et al., 2015, Virgolino et al., 2022) Unemployment's negative mental consequences are observed at micro- and macroeconomic levels. Furthermore, the adverse psychological effects of being without a job affect those out of work and their families. (Goldman-Mellor, 2016) Overall, the unemployed tend to have increased annual disease rates and mortality compared to their working counterparts. (Athar et al., 2013) Notably, unemployment is considered both a risk factor and a consequence of mental health disorders. Similarly, workplace stigmatisation may result from a mental disorder but can also be a stimulant of psychosocial conditions. (Olesen et al., 2013)

Overall, the relationship between work and mental health is intense, complex, and often bilateral and lagged in time. Mental illnesses and the working environment may impair and exacerbate each other, fuelling a vicious circle and augmenting the associated socioeconomic burden to all.

3. Socioeconomic costs of mental disorders in the workforce

The enormous cost of mental health problems in the workforce weighs on the economy and society, companies and organisations that employ those with mental conditions, as well as the mentally ill themselves, together with their families and households. However, the burdens experienced by each set of economic entities are not mutually exclusive. The lost productivity is suffered by the employers, but the aggregate represents the total forgone production in the economy. Lost income is registered for individuals and households, but at the macro level, it adds up to the overall decline in earnings and decreases tax revenues for the state budget. A person losing a job due to mental conditions is not only a cost to them and their households as it is reflected in employers' incline in cost for recruitment and training of new a worker and also national unemployment rates. It is essential to understand that the costs of different market actors are connected.

3.1 Buden to the economy and the society

Mental disorders contribute significantly to the burden of disease worldwide. Depression alone accounts for a substantial proportion of the weight as it is one of the most common causes of disability. (Cadeddu et al., 2015) Mental conditions impact the economy via direct expenditures on treatment and indirect costs such as reduced economic productivity and higher unemployment rates. WHO estimates indicate that the indirect burden vastly outweighs the direct components. For instance, in 2010, the total cost of mental health was composed of US$ 0.8 trillion of direct cost and US$ 1.7 trillion of lost economic productivity and premature mortality. (Lawson et al., 2022) Forecasts predict that the total burden to the global economy will reach US$ 6 trillion by 2030, thus more than the projected costs of cancer, diabetes and chronic respiratory disease combined. In 2020, the average global annual societal cost of mental health conditions ranged from US$ 1180 to US$ 18,313 per treated person and almost half of this burden was associated with indirect costs. (WHO, 2022a) As 15% of the economically active population worldwide live with a mental disorder, the subsequent global economic burden includes an annual loss of 12 billion working days and a total cost exceeding US$ 1 trillion, primarily due to forgone production. (WHO & ILO, 2022)

Mental illnesses negatively affect employment and labour market participation as well as increase work absenteeism, which results in significant costs in the workplace. A counterfactual simulation for the US indicates that eliminating mental disorder symptoms would allow for potential gains in employment for 3.5 million individuals and a reduction in workplace absenteeism costs of US$ 21.6 billion. (Banerjee et al., 2017) In fact, in the US, mental disorders

ranked first as the most costly conditions, with spending reaching US$ 201 billion in 2013. (Roehrig, 2016) An additional poor mental health day may have caused a 1.84 percentage point lower per capita real income growth rate and US$ 53 billion less of total annual income across the US between 2008 and 2014. (Davlasheridze et al., 2018) Furthermore, untreated mental illnesses have severe consequences for individuals, leading to a lower quality of life and a substantial negative impact on the global economy through forgone productivity. This loss for the US is estimated at around US$ 300 billion annually. (Kargbo, 2022) In China, the overall yearly costs of mental disorders increased for individual patients from US$ 1,094.8 in 2005 to US$ 3,665.4 in 2013 and for the whole economy from US$ 21.0 billion to US$ 88.8 billion. The total economic burden of mental conditions may account for more than 15% of the total health expenditure and 1.1% of the country's gross domestic product. (Xu et al., 2016) The economic burden in Australia exceeds US$ 200 billion annually, leading to wide-ranging recommendations for improving mental health and reforming the healthcare system. (Whiteford, 2022) In the UK, mental disorders are the leading cause of disability, responsible for 28% of the national disease burden. (Schofield et al., 2022)

In Poland, based on analysis of the Social Insurance Institution (ZUS) medical leave data (Karczewicz & Sikora, 2019, Karczewicz & Sikora, 2024), a pattern can be derived. In 2023, absenteeism due to mental issues accounted for 26.1 million days, constituting 11% of total absence time. These work non-attendances were related to 1.4 million, 6.5% of the total sick leave certificates. A mental health-related absence lasted 18.6 days on average, so 75% longer than the country's overall mean. The absences generated a total cost of medical leaves of 2.3 billion PLN (US$ 0.6 billion), of which 59% were sickness benefits, and the rest were remuneration for the period of incapacity for work. In 2023, compared with 2018, Poland's total number of leave days increased by 17.9% (average 3.3% year to year – yty), and the number of certificates by 35.2% (6.2% yty). Simultaneously, for mental-related conditions, the increments were 34.4% (6.1% yty) and 27% (4.9% yty), respectively. Thus, mental disorders have a higher growth rate for the number of days but lower for the number of leaves than the general tendencies, and the change of mental health days of leave is much faster than for the certificate number. The discrepancy is because the average absence time for mental illnesses increased by almost 6%, while total leaves decreased by 13%. It is worth noticing that 2018 mental health leaves constitute 8% of total absence days (3 percentage points less than in 2023) and 5.5% of number of leaves (0.9 percentage points less). Investigating more recent data indicates that in 2023, compared to the previous year, the number of sick leaves due to mental conditions increased by 8.7% and their share in total leaves by one percentage point, while

absence days increased by 9.5%. Thus, the pace of change for mental-related sick leaves has increased drastically.

In 2023 in Poland, among the most frequent causes of medical leave due to mental conditions were reactions to severe stress and adjustment disorders (33.9%), depressive episodes (17.9%), and other anxiety disorders (17.5%). Notably, reaction to severe stress and adaptation disorders has shown a 12.0% increase in the number of medical certificates and a 13.5% increase in the number of days of sickness absence compared to 2022. Additionally, psychosomatic symptoms of malaise and fatigue were a significant cause of medical leaves – 2% of days and 6% of certificates due to mental problems. (Karczewicz & Sikora, 2024)

Notably, the economy is not only burdened by the situation of a mentally ill person but also by the reduced income and working capability of their informal caregivers. In Spain, estimates indicate that financial costs of informal care account for almost 18% of the total burden due to mental conditions. (Oliva-Moreno et al., 2009) In Australia in 2015, the annual cost of informal care reached AU$ 13.2 billion (around US$ 8.8 billion). These costs include the loss of income of caregivers, which is around 3.5% of the total disease burden and are expected to increase by 43% by 2030. Additionally, caregivers' income loss diminishes the tax revenue, and their limited work capability creates a need for extra welfare payments, which impacts the economy and national budgets.

It seems clear that, in the best interests of the country, its economy and society, every effort must be made to prevent and reduce the incidence of mental disorders among workers. Secondly, for people with mental illness, policies should support labour market participation and financial independence, as this would significantly decrease the national costs of lost production and social transfers.

3.2 Employer costs

Looking from the employer's perspective, the company or an organisation, public or private, is burdened by workers' mental health primarily by their absenteeism and presenteeism. Various factors contribute to mental health-related absenteeism, including personal (e.g. family problems, health issues) and work-related (i.a., work stress, dissatisfaction with work conditions, mobbing). (Lipovac, 2020, Sampaio & Baptista, 2019) Poor mental health, both directly and indirectly, considerably adds to the employer costs. (Fernando et al., 2017)

Mental health conditions, in general, and CMDs, in particular, were found to affect absenteeism rates strongly, and, in fact, their impact is more substantial than that of physical health. (Bryan et al. 2021) Notably, the severity of the mental condition is a significant

determinant of the number of sick leave days, partly indirectly due to the symptomatic burden and social workplace exclusion. (Frank et al., 2022) Studies for the public sector indicated that mental and behavioural disorders cause absenteeism, leading to a substantial number of lost workdays. In Brazil, the prevalence of mental health-related absences of federal civil servants has been rising (0,4% in 2013 to 2,42% in 2018), and it is the highest for female employees aged 41+ due to depression and anxiety, with episodes lasting for 6-15 days. (Bastos et al., 2018, de Miranda & Vasconcelos, 2023) In the population of Brazilian teachers, mental conditions constituted the second most common cause of medical leave – 7.5% of all sick absences (after diseases of the musculoskeletal system and connective tissue 7.8% and before diseases of the respiratory system 6.1%). (Dias & Santos, 2023) The medical leave due to mental conditions is typically extended. For instance, depression-related absence has a median length of 34 days. RTW after CMD absence may be even more delayed in the presence of other psychosomatic conditions. (Ervasti et al., 2015) The workplace environment significantly impacts non-attendance as mobbing and harassment increase absenteeism (even by 60%), staff turnover, and the organisation's recruitment, training, and legal costs. (ILO, 2020)

The burden of absenteeism in big companies may cause yearly million-dollar or euro losses. (Silva et al., 2020) In the case of smaller businesses (no more than 50 employees), the potential problem of workers' non-presence could also be devastating. Especially since it is challenging to maintain a good work environment in these workplaces. (Jeon & Kim, 2018) Absenteeism is the most costly in the manufacturing industry as it drains productive work and hinders economic growth. (Ramdass, 2017) In project-oriented organisations, absenteeism can also be a hindrance and generate costs or reduce profits by disturbing task dependencies and leading to delays. (Lipovac, 2020)

The other leading source of reduced productivity in an organisation is presenteeism. The relationship between absenteeism and presenteeism is strong – higher rates of mental-related absences correspond with an elevated prevalence of presenteeism. (Suzuki et al., 2015) In general, presenteeism is understood as attending work while ill. Still, when a poor health state causes a decline in productivity and quality of work, it is referred to as dysfunctional presenteeism. Mental health problems have been found to contribute to the latter more than physical conditions. While the average presenteeism for mental disorders is estimated at around 6% and for physical impairment 7%, a deterioration from good to poor health doubles the probability of presenteeism for physical conditions (to 14%) and triples it for psychosocial problems (up to 18%). Moreover, marginal mental health decline has substantial effects on

those whose mental health is already below average, and these results are consistent across demographic groups, job types and working arrangements. (Bryan et al., 2022)

Employers, managers, superiors and even co-workers may perceive presenteeism as preferable to absenteeism as working, even while ill because it allows for some production to be achieved while absence generates none. A study in Australia assessing the cost per employee with depression concluded that short-term absenteeism generated a higher mean burden to the organisation than presenteeism, although the differences were marginal. However, working while mentally ill also creates risks and costs due to decreased concentration, fatigue, and poor work performance. (Cocker et al., 2014)

Employees themselves may also favour attending their jobs while mentally unwell because of shame or fearing stigmatisation at the workplace. For instance, in Germany, 65.5% of workers would be at least a little ashamed if they had a mental illness, and 54.1% would attend work with a mental condition without even talking about it. The results are disconcerting as around 55% of employees reported impaired and 23% low current mental well-being. Overall, the prevalence of presenteeism is positively associated with mental health shame. (Sander et al., 2023) Additionally, stigma and discrimination at the workplace constitute barriers to seeking healthcare, leading to untreated conditions and deteriorating health state and, in consequence, adverse occupational outcomes for employers. In particular, exacerbated existing health problems, disabilities, and increased risk of subsequent illness tend to result in prolonged absences, lost productivity, higher employee turnover, extra cost and a company's revenue decline. (Brouwers, 2020)

Employees with impaired mental health not only cause reduced productivity but are prone to making poor decisions and more mistakes at work, for example, in dispensing drugs by pharmacists. (Niven & Ciborowska, 2015) These errors may become a severe problem in some hazardous, emergency-related or high-responsibility industries and occupations as dysfunctional presenteeism is rising as a trade-off with absences. Growing understating and awareness of the costs of presenteeism, particularly in safety-critical environments, indicates that presenteeism should be recognised as a work hazard and a risky or risk-taking behaviour that should be carefully evaluated and managed. (Kinman, 2019)

As a result, employers may be discouraged from employing workers with mental conditions, fearing the potential cost and organisational challenges they may face in the future.

3.3 Individual and household costs

From an individual perspective of an employee with a mental condition, mental illness has a bidirectional causal relationship with employment and income. Studies indicate that mental disorders decrease employment and, therefore, income, while on the other hand, negative economic shocks hinder mental health. As a result, poverty is disproportionately associated with mental illness, both as a cause and an effect. (Ridley et al., 2020) In the UK, SMIs are one of the leading sources of income inequality. Moreover, those with mental health conditions are at increased risk of experiencing economic difficulties, such as debts, unemployment; living in poor neighbourhoods burdened with high crime rates, environmental neglect, and inadequate transportation; living in social housing or substandard housing; having limited education or training; having small social networks; suffering from physical health problems; and having restricted access to essential services. (Boardman et al., 2015) A study for the US found that distress quickens the entry into, prolongs the stay in and increases the likelihood of re-entering the wealth deficit. For people with high levels of psychological distress, differences in levels of savings, medical debt, and labour income are the predominant contributors to diminished net worth and elevated probability of deficit. (Balloch et al., 2022) Additionally, mental diseases contribute to reduced income throughout working life and, subsequently, via contributions, also during retirement by decreased pension – burdening both individuals and relevant governmental institutions. (Schofield et al., 2022)

Mental diseases tend to cause decreases in labour income, which subsequently results in a substantial reduction in household consumption expenditures – the reaction is stronger for mental disorders than for physical ones, especially if the issue concerns the household head. (Babiarz & Yilmazer, 2017) Furthermore, the negative impact of declining household spending varies by gender and couple status. For example, single and married women with mental conditions limit expenditure on their education, which may indicate a long-term consequence and cost of impaired mental health. (Dahal & Fertig, 2013)

Unemployment is another economic threat to people with mental illness and their households. Joblessness is not only a macroeconomic problem but can also enhance a household's financial strain. (Virgolino et al., 2022) As Brouwers's (2020) study has shown, people with severe mental disorders are seven times more likely to be unemployed, and those with CMDs are three times more so than people with no mental issues. Additionally, discrimination and negative attitudes of superiors decrease the likelihood of people with mental health conditions being hired or supported when they are already employed. (Brouwers, 2020) Hence, employees afraid of losing their jobs due to mental illness try to hide their mental

problems. (Jeon & Kim, 2018) Estimates indicate that people who had suffered from depressive symptoms in the past have lower long-term job retention by 5.55%. (Arizal & Wisana, 2023) Additionally, poor mental health resulting from joblessness reduces re-employment chances significantly. (Tübbicke & Schiele, 2024)

It should be noted that, in turn, job loss and reduced household income substantially increase the risk of mental disorders, particularly mood disorders, constituting a vicious cycle of the labour market and mental health association. (Barbaglia et al., 2015) Long-term unemployment enhances various social problems, such as poverty or increased risk of physical and mental health disorders. (Sharone et al., 2018) Joblessness is also related to lower self-esteem, which in turn is linked with depressive symptoms – however, this association is predominantly observed for men and not for women. (Álvaro et al., 2019)

As the relationship between mental health and unemployment is bidirectional, mental disorders constitute both a consequence of and risk factor for joblessness. For women, the causality in each direction tends to have similar strengths. For men, however, the effect of mental health on unemployment outweighs the impact of unemployment on subsequent mental health. (Olesen et al., 2013)

The severity of mental disorders has a significant impact on the individual economic situation. Mild and moderate mental illnesses can hinder participation in the labour market, lead to absences from work and limit earning potential. (Barsky et al., 2023) Severe mental disorders reduce the levels of employment before and especially after the diagnosis. In Finland, over 50% of people with a SMI do not have any employment earnings after they receive the diagnosis, and almost all rely heavily on income transfer payments. (Hakulinen et al., 2020)

Mental diseases have a significant impact not only on the person with the illness but also on their close ones. In the case of SMIs, the informal carers' well-being is psychologically and economically impacted by reduced income and working capability. In turn, the caregiver's financial and employment circumstances can also lead to feelings of isolation and affect their own mental health. (Schofield et al., 2022) Interestingly, in the case of the mentally ill person's partner, an increase in productivity and income may occur. These surplus earnings arise from the need to compensate for living with an individual suffering from a mental disorder. The value of the compensation for the patient's reduced income and additional expenditures is substantial – for instance, estimated for Australia between US$ 33,000 and US$ 50,000 annually. (McNamee, et al., 2021)

Overall, the distribution of costs generated by mental disorders in the labour force, both directly and indirectly, shows that the burden on all economic actors is enormous. However, the perspective of the individual party often limits the ability to assess the full range of harmful consequences. This results often from misperceived self-interests and priorities. Therefore, the approach to workers' psychosocial well-being must be preventive, multidimensional, and multidisciplinary. It is essential to understand that some mental health impacts may be long-term, delayed, indirect, unforeseen and interdependent with other actors' burdens.

4. Conclusions and recommendations

Mental health is fundamental to an individual's well-being and quality of life. However, it is also widely recognised as a key factor in public health, sustainable development, and productive human capital by international organisations such as WHO, the United Nations (UN), and ILO. (UN, 2015, WHO, 2022a, WHO & ILO, 2022) From a demographic and financial perspective, the labour force is an input in global production, supports the inactive population through taxes and social contributions, and drives the economy through income and expenditures.

The socioeconomic burden caused by mental disorders is enormous both on the macro level and from the individual perspective of a worker, their family, and employers. These direct and indirect costs are bearded by the whole society, all market and labour market participants, and are expected to shoot up in the future. The prevalence of mental conditions is high and tends to increase in the entirety of the population and for young people, including adolescents and children, in particular, which indicates that the problem of mental health in the workforce will be growing at a fast pace. (Żółtaszek, 2024) Thus, the cost generated by the health issues of the economically active, which is already alarmingly immense, is bound to increase in the long term. It seems evident that addressing the mental health of the labour force in the workplace and, broader, in society is essential for improving productivity and reducing the economic burden associated with mental health disorders. However, as the presented evidence indicates, current actions are vastly insufficient as the problem is growing at an alarming pace. A lack of understanding of the entire multidimensional impact of workers' mental health on various economic entities may be partly responsible for the inadequate countermeasures.

From the employers' perspective, organisations may be tempted to promote presenteeism, either directly by benefits relying on attendance or indirectly by a hostile work environment for mental-related absences. These actions created extra mental pressure, which negatively impacts mental health and can be considered a form of labour market discrimination against people with

certain illnesses. Unfortunately, in long-term untreated mental disorders tend to worsen, and more severe conditions cause more frequent and longer medical leaves, elevated chances of disability and leaving the labour market, which generates additional costs for the company. Presenteeism reduces productivity, further hinders mental health and may lead to minor errors and severe mistakes at work, which are bound to cause additional financial and organisational burdens. Overall, employers should be more aware of the total cost of mental disorders in the workforce. As presenteeism is linked to shame, reducing mental health stigma and discrimination, as well as creating a safer working environment, are fundamental for improving employees' mental health. (Sander et al., 2023)

The general population should be better educated in recognising symptoms of mental conditions and emotionally support those who suffer from them, also at work. Acceptance, empathy, and tolerance are fundamental for increasing the share of treated disorders and speeding up the treatment. Only changing the societal attitude can negate the low self-esteem, self-stigma, shame, and fear of workers experiencing mental episodes. Supporting employees with mental illness to increase their self-confidence and regain control, discuss the value of their work, and create working conditions that enable employees to do meaningful work appear to be essential for a successful RTW after medical leave due to mental disorders. Furthermore, a favourable work environment can prevent sickness absence in the long term. (Joosen et al., 2022)

Ideally, the positive changes in society and the workplace ought to be natural, and the change should result from a true understanding of the sources and costs of mental disorders. However, realistically, the responsibility for protecting mentally ill workers lies with the regional, national, and international governments. Policies should be designed to enforce instantaneous improvement of the occupational environment and provide essential protection from psychosocial risks in the workplace, as well as assistance for those with mental conditions. Taking into account the significant economic burden of mental illness, it is critical to prioritise mental health on the national and international agenda, increase investment in mental healthcare and introduce cost-effective interventions to mitigate the socioeconomic cost. (Razzouk, 2017) Additionally, improving people's mental health increases educational outcomes and labour force participation, raises productivity and strengthens social functioning for the benefit of all. (WHO, 2022a)

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