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Mental health in a post-pandemic perspective: economic and social costs

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Abstract

The COVID-19 pandemic has caused a significant increase in the number of mental health disorders, such as depression, anxiety, and PTSD, leading to higher treatment costs and placing a burden on social insurance systems. The aim of this literature review was to examine the economic costs of the pandemic related to mental health and assess its impact on social insurance systems. The review also analyzed the growing demand for mental health services during different phases of the pandemic. The methodology included an analysis of scientific literature from 2020-2023, with sources from databases like PubMed, Scopus, and JSTOR. The focus was on studies that provided a detailed examination of the economic aspects of the pandemic in the context of mental health, including both direct costs (consultations, medications) and indirect costs (reduced productivity, work absences). The findings indicate

significant economic burdens for both healthcare and social insurance systems. The COVID-19 pandemic has increased the cost of treating mental health disorders globally. Both WHO and OECD highlight that global indirect costs related to lost productivity amount to approximately \$1 trillion annually. Additionally, the pandemic exposed weaknesses in social insurance systems, which need to be reformed to address new health challenges. Key conclusions emphasize the need for further investment in mental health care, particularly in prevention and early intervention. Such investments could lead to significant economic savings by reducing treatment costs and improving productivity. Reforming social insurance systems is also recommended to better accommodate the needs of individuals suffering from mental health disorders.

Keywords: COVID-19; mental health; economic costs; social insurance; productivity loss

Background

The COVID-19 pandemic triggered a global health crisis with effects that extend far beyond the physical health of populations. One of the most significant challenges faced by healthcare systems worldwide has been the sharp rise in mental health disorders. The unprecedented scale of this pandemic requires not only adaptations in treatment and access to care but also an analysis of the economic costs of treating mental health disorders and their impact on social insurance systems.

The costs of treating mental health disorders have risen sharply during the pandemic, both directly and indirectly. Direct costs include expenses for medical consultations, pharmacological treatment, and hospitalizations, while indirect costs stem from reduced work productivity, sick leaves, and long-term consequences such as mental health-related disabilities. Rates of depression, anxiety, and post-traumatic stress disorder (PTSD) significantly increased during the pandemic, further straining healthcare resources (O'Connor et al., 2021).

According to WHO (2022), the pandemic led to a global increase in cases of depression and anxiety by approximately 25%, which in turn resulted in higher healthcare expenditures and

pressure on social insurance systems. The pandemic prompted the development of remote therapy and mental health support, but despite the increased access to such services, the costs of implementing and maintaining them remain high (Rohde et al., 2022).

In particular, countries with advanced health insurance systems, such as the United States and European nations, faced the challenge of increasing funding for supporting individuals affected by mental disorders, while simultaneously dealing with the financial strain caused by the pandemic (Kniffin et al., 2021). The increased number of sick leaves, related both to the direct effects of the pandemic and to mental health disorders, negatively impacted the labor market and public revenues, further increasing the pressure on national budgets.

One of the key economic aspects of the pandemic's impact on mental health is its effect on social insurance systems. The pandemic significantly increased the number of people utilizing health and social benefits, such as sick leave and disability benefits, leading to higher costs for social insurance systems (Moynihan et al., 2021). In European countries with well-developed public health insurance systems, governments had to confront a sudden rise in payouts related to work incapacity due to mental disorders (Giorgi et al., 2020). The long-term effects of the pandemic include an increase in the number of individuals who, after treatment, are unable to return to full professional activity. The rise in disability benefits and other social benefits for these groups further strains social insurance budgets, potentially leading to the need for higher social insurance contributions or benefit reductions (OECD, 2021).

Social insurance systems now must adapt to the growing number of individuals requiring long-term psychiatric care and psychological rehabilitation, which may necessitate restructuring of future funding. The COVID-19 pandemic not only revealed weaknesses in insurance systems but also forced governments and public institutions to reflect on future challenges related to long-term health impacts, including mental health.

The COVID-19 pandemic created specific conditions conducive to the development of mental health disorders. Prolonged periods of social isolation, uncertainty about the future, and fear of infection and health consequences contributed to the deterioration of many people's mental well-being (Holmes et al., 2020). The most frequently diagnosed disorders include depression, anxiety disorders, and PTSD, whose incidence rose on an unprecedented scale.

It is also important to note the inequalities in mental health, which the pandemic has further exacerbated. Individuals with lower socioeconomic status, the elderly, and ethnic minorities were particularly affected by the pandemic's mental health consequences, increasing disparities

in access to healthcare and psychological support (Panchal et al., 2021).

As a catalyst for a global mental health crisis, the COVID- 19 pandemic underscored the need for not only investment in psychological care systems but also the inclusion of long-term costs associated with mental disorders in public policies.

The aim of this literature review is to analyze and assess the economic costs of treating mental health disorders resulting from the COVID-19 pandemic and its impact on the social insurance system. This review also seeks to examine the changing societal demand for mental health services before, during, and after the pandemic. Special emphasis is placed on analyzing the increase in indirect costs, such as reduced work productivity, as well as the pandemic's impact on public policies and expenditures related to social and healthcare systems.

Review methodology

The literature review was conducted based on a search of scholarly articles, reports, and other publications available in databases such as PubMed, Scopus, Google Scholar, and JSTOR. The selection criteria for materials were based on the following assumptions:

- A. Publications from the years 2020–2023, covering the period of the COVID- 19 pandemic and the initial post-pandemic phases, were included.
- B. Keywords used for article searches included "economic costs of mental health," "COVID- 19 and social insurance systems," "mental health disorders pandemic," "mental healthcare costs," and "mental health services during the pandemic."
- C. The analysis incorporated peer-reviewed scholarly articles, reports from international institutions (e.g., WHO, OECD), and systematic reviews. Non-peer-reviewed publications were excluded to ensure high-quality and reliable data.
- D. Publications were included if they provided detailed discussions of the economic aspects of mental health in the context of the COVID- 19 pandemic, such as direct and indirect treatment costs, the impact on social insurance systems, and changes in the demand for mental health services.
- E. Studies focusing exclusively on the physical aspects of the pandemic or general healthcare costs without reference to mental health were excluded.
- F. The analysis of the selected materials focused on comparing research findings on the rising

costs of treating mental health disorders and their impact on national economies and social insurance systems.

Results

The COVID-19 pandemic has had a profound impact on mental health, leading to a significant increase in the economic costs associated with the treatment of mental health disorders and placing a burden on social insurance systems. Research by Deloitte (2023) suggests that costs arising from inequalities in access to mental health care could reach \$477.5 billion by 2024, with excess costs rising to \$14 trillion by 2040. High levels of absenteeism and unemployment due to mental health disorders further amplify these costs, affecting both the economy and social insurance systems (Deloitte Insights, 2023; Giorgi et al., 2020).

Studies indicate that workplace mental health has been severely affected by the pandemic, with increased rates of depression and anxiety observed globally (Giorgi et al., 2020; Holmes et al., 2020). According to the OECD (2021), the pandemic significantly increased demand for mental health services, further burdening healthcare and social insurance systems. Indirect costs, such as reduced productivity and increased sick leave, now represent a substantial portion of the total expenditure related to mental health (OECD, 2021).

McKinsey & Company (2021) also emphasizes that about 60% of total healthcare spending in the United States is associated with individuals suffering from mental health disorders and addictions, exacerbating the challenges faced by the healthcare system. The pandemic has only intensified these issues, leading to a sharp rise in demand for healthcare and psychological support (McKinsey & Company, 2021; Holmes et al., 2020). Furthermore, the OECD (2021) reports that countries with developed healthcare systems, such as those in Western Europe, had to significantly increase healthcare expenditures to meet the growing demand for mental health services during the pandemic (OECD, 2021).

The COVID-19 pandemic resulted in a significant increase in the demand for psychological and psychiatric care globally. The American Psychological Association (APA) reported sharp increases in treatment for mental health conditions such as anxiety, depression, and PTSD, particularly among adolescents, young adults, and healthcare workers. This surge

has placed immense pressure on mental health providers, leading to longer wait times and increased workloads (American Psychological Association (APA, 2021; APA, 2022). The 2023 State of Mental Health in America report highlighted that the prevalence of mental health issues, particularly among young people, has more than doubled since the pandemic began. Despite the growing need, access to care remains a major challenge, with substantial gaps between those requiring treatment and those able to receive it, especially in states with fewer mental health resources (Mental Health America, 2023). Globally, the pandemic accelerated the use of telehealth services for mental health care. While this has alleviated some access issues, there remain concerns regarding long-term system capacity to meet the continued increase in demand (APA, 2022).

The following table summarizes key aspects of this post-pandemic demand for mental health services:

Aspect	Increase Post-Pandemic
Demand for mental healthcare	<p>Significant rise in demand for treatment of anxiety, depression, and PTSD, especially among young people and healthcare workers.</p> <p>(APA, 2021; Mental Health America, 2023)</p>
Telehealth usage	<p>Widespread adoption of telehealth services for mental health care, with concerns about long-term capacity.</p> <p>(APA, 2022)</p>
Workplace mental health	<p>Rising demand for workplace mental health programs to address absenteeism and reduced productivity.</p> <p>(APA, 2021)</p>
Wait times for care	<p>Longer waitlists and increased workloads for mental health professionals due to the surge in demand.</p> <p>(APA, 2022)</p>

The economic burden of mental health extends beyond healthcare costs. Studies have shown that mental health disorders significantly impact labor markets due to absenteeism and reduced productivity (Panchal et al., 2021; Kniffin et al., 2021). The costs associated with absenteeism rose sharply during the pandemic, with the UK experiencing a 30% increase in work absences due to mental health disorders (OECD, 2021). These findings align with broader trends identified in international research, which suggests that mental health issues contribute to substantial indirect costs through lost productivity and increased reliance on social security benefits (Moynihan et al., 2021; Rohde et al., 2022).

In addition to the direct costs of treatment, the pandemic has exposed the vulnerability of social insurance systems worldwide. Reports indicate that in the United States, 23% of health benefits in the social insurance system were paid to individuals with mental health disorders, adding to the financial strain on the system (McKinsey & Company, 2021). This reflects broader global trends, with WHO (2021) noting that mental health disorders generate annual productivity losses of approximately \$1 trillion, posing a significant burden on economies worldwide (World Health Organization, 2021).

Research further underscores the disproportionate impact of the pandemic on specific demographic groups, exacerbating pre-existing inequalities in access to mental healthcare. Lower-income countries, in particular, faced significant challenges in adjusting their healthcare budgets to the rising costs of mental health services during the pandemic (Giorgi et al., 2020; Panchalet al., 2021). Studies by Kämpfen, Kohler, and Kohler (2020) and Bierman et al. (2021) highlight how economic and social factors influenced mental health outcomes during the pandemic, with those facing financial insecurity and social isolation experiencing heightened mental health risks.

The need for stronger mental health support systems is clear. WHO and OECD recommend that investing in mental health prevention and early intervention could help reduce the long-term costs of treatment (OECD, 2021; World Health Organization, 2019). Research supports the idea that every dollar invested in mental healthcare yields a fourfold return through improved productivity and reduced treatment costs (World Health Organization, 2019; Cullen, Gulati, & Kelly, 2020).

In conclusion, the COVID-19 pandemic has dramatically increased the costs associated with mental health disorders, placing a substantial burden on healthcare and social insurance systems worldwide. Addressing these issues requires both increased investment in mental health services and comprehensive reforms to social insurance systems to better meet the health and

economic challenges posed by the pandemic (Auerbach & Miller, 2020; McKinsey & Company, 2021). The long-term effects of the pandemic on mental health will likely persist, underscoring the need for sustained policy intervention and resource allocation to mitigate its impact on global healthcare systems and economies (Patel & Saxena, 2020; Holmes et al., 2020).

Conclusions

- The COVID- 19 pandemic has contributed to a sharp increase in the number of individuals suffering from mental health disorders such as depression, anxiety, and PTSD.
- The pandemic triggered an unprecedented rise in the costs of treating mental health disorders, both indirect treatment expenses and in indirect costs, such as work absences and reduced employee productivity.
- The rise in sick leaves and the growing demand for disability benefits due to mental health disorders have placed significant pressure on social insurance systems, particularly in developed countries.
- In addition to direct healthcare costs, the pandemic generated substantial indirect costs, such as decreased productivity and increased strain on social welfare systems.
- In summary, the COVID- 19 pandemic not only intensified the global mental health crisis but also highlighted the need for reform in healthcare and social insurance systems. Increasing access to psychological services and effectively managing treatment costs will be key in mitigating the long-term effects of the pandemic.

Recommendations

One of the key conclusions from the literature review is the need for significant increases in financial investment in mental healthcare. Investing in prevention and early intervention can not only improve the mental health of populations but also yield substantial economic savings. The WHO (2021) indicates that every dollar spent on treating mental health disorders can generate a fourfold return through increased productivity and reduced indirect costs related to work absences. Therefore, it is recommended that governments allocate more resources to early interventions and the development of remote psychological support services, such as telemedicine.

The COVID-19 pandemic has exposed the weaknesses of many social insurance systems, which were not adequately prepared for the surge in people requiring long-term care due to mental health disorders. The OECD (2021) recommends implementing reforms in insurance systems to better accommodate the needs of individuals with mental health conditions. These reforms should include both enhanced support for individuals on sick leave due to mental health disorders and improved access to psychological and psychiatric rehabilitation.

Research indicates that the pandemic has exacerbated inequalities in access to healthcare, particularly in lower-income countries. To mitigate the economic impacts of the pandemic, it is essential to increase the availability of mental health services, especially for the most vulnerable groups, such as the elderly and those with lower socioeconomic status. Governments should focus on expanding social support networks and ensuring universal access to telemedicine, which proved to be an effective method of delivering healthcare services during the pandemic. Mental health disorders, such as depression and anxiety, have a significant impact on work productivity and absenteeism, which in turn generate substantial costs for national economies. It is recommended that both employers and governments implement mental health support programs in workplaces. McKinsey (2021) suggests that integrating mental health programs into the workplace can significantly improve employee productivity and reduce costs

related to absenteeism and low performance.

The COVID-19 pandemic has highlighted the need for public policies to better incorporate mental health aspects into long-term planning. WHO and OECD recommend that national governments implement policies that integrate mental health into health and economic strategies, particularly in the context of health crises. The introduction of social support programs that promote mental health can help reduce the long-term costs of the pandemic and improve the overall well-being of societies.

Additionally, governments should address the disproportionate effects of the pandemic on vulnerable groups, including those with lower socioeconomic status and ethnic minorities. Expanding access to mental health services, particularly for these groups, through telemedicine and community-based support, will be crucial in mitigating the broader impacts of the pandemic and fostering more equitable health outcomes.

Author's contribution:

Conceptualization: Methodology: PJ Investigation: PJ Writing—rough preparation: PJ; KS

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