THE IMPACT OF MENTAL HEALTH DISORDERS ON PHYSICAL DISEASE RISKS: A COMPREHENSIVE REVIEW

DAMPAK GANGGUAN KESEHATAN JIWA TERHADAP RISIKO PENYAKIT FISIK: TINJAUAN KOMPREHENSIF

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Abstract

This study evaluates the impact of mental health disorders such as stress, anxiety, and depression on the risk of various physical illnesses, including cardiovascular diseases, type 2 diabetes, obesity, immune system disorders, respiratory conditions, skin disorders, digestive ailments, and osteoporosis. Employing a literature review methodology, the research analyzed data from previous studies, uncovering that mental disorders elevate the risk of cardiovascular diseases through oxidative stress and systemic inflammation mechanisms. The link between stress and glycemic dysregulation in type 2 diabetes highlights a trend towards increased insulin resistance. Depression, closely associated with obesity, is often exacerbated by unhealthy eating habits used as coping mechanisms. Chronic stress-induced immune system disorders result in decreased immune responses, while respiratory issues such as asthma are intensified by increased anxiety. Skin conditions like psoriasis and eczema frequently worsen due to psychological stress. In digestive disorders such as irritable bowel syndrome, stress contributes to more severe symptoms, and osteoporosis is similarly affected by chronic stress impacting bone metabolism. These findings affirm the critical importance of routine mental health screenings and the integration of effective public health interventions in overall health management, as exemplified by the Rehab Hati Foundation. Public health programs that enhance mental health can aid in preventing and managing physical illnesses, improving life quality, and reducing overall health burdens. The conclusion highlights the essential role of effective mental health management as both a preventive and therapeutic strategy.

Keywords : chronic disease management, health impacts of stress, mental physical health link, psychological stress effects, stress-related disorders

Abstrak

Penelitian ini menilai pengaruh gangguan kesehatan mental seperti stres, kecemasan, dan depresi terhadap risiko berbagai penyakit fisik, termasuk penyakit kardiovaskular, diabetes tipe 2, obesitas, gangguan sistem imun, kondisi pernapasan, penyakit kulit, gangguan pencernaan, dan osteoporosis. Metode tinjauan literatur digunakan untuk menganalisis data dari penelitian sebelumnya, yang mengungkap bahwa gangguan mental meningkatkan risiko penyakit kardiovaskular melalui mekanisme stres oksidatif dan inflamasi sistemik. Hubungan antara stres dengan disregulasi glikemik pada diabetes tipe 2 menunjukkan kecenderungan peningkatan resistensi insulin. Depresi, yang erat kaitannya dengan obesitas, sering diperparah oleh kebiasaan makan yang tidak sehat sebagai mekanisme koping. Gangguan sistem imun yang dipicu oleh stres kronis menyebabkan respons imun yang berkurang, sementara gangguan pernapasan seperti asma diperburuk oleh kecemasan yang meningkat. Penyakit kulit seperti psoriasis dan eksim sering kali memburuk akibat stres psikologis. Pada gangguan pencernaan seperti sindrom iritasi usus besar, stres berkontribusi pada gejala yang lebih parah, dan osteoporosis juga dipengaruhi oleh stres kronis yang mempengaruhi metabolisme tulang. Temuan ini menegaskan pentingnya skrining kesehatan jiwa secara rutin dan integrasi intervensi kesehatan publik yang efektif dalam manajemen kesehatan keseluruhan, seperti Rehab Hati Foundation. Program kesehatan publik yang meningkatkan kesehatan jiwa dapat membantu mencegah dan mengelola penyakit fisik, meningkatkan kualitas hidup, dan mengurangi beban kesehatan secara keseluruhan. Kesimpulan menyoroti pentingnya manajemen kesehatan mental yang efektif sebagai strategi preventif dan terapeutik.

Kata Kunci : dampak stres pada kesehatan, efek stres psikologis, gangguan terkait stres, hubungan kesehatan mental dan fisik, manajemen penyakit kronis

1. INTRODUCTION

Mental health is a crucial aspect of overall health that is often overlooked compared to physical health. Unsettled mental conditions, such as stress, anxiety, and depression, not only diminish the quality of life for individuals but also have serious implications for physical health, including an increased risk of cardiovascular diseases, diabetes, obesity, and functional disorders (Xiong et al., 2020). The relationship between mental and physical health shows that emotional imbalance can disrupt the regulation of body functions and responses to internal and external stimuli, thereby creating a comprehensive disease burden on the global immune population (Global Burden of Disease 2019 Mental Disorders Collaborators, 2022).

Statistical data support the urgency of mental health issues on a global scale. According to the World Health Organization (WHO), approximately 264 million people worldwide suffer from depression, while over 284 million people experience anxiety disorders (Global Burden of Disease 2019 Mental Disorders Collaborators, 2022). These figures are increasing as the number of cases of depression and anxiety rises due to the COVID-19 pandemic, as reported in various studies and systematic reviews (Bueno-Notivol et al., 2021). The COVID-19 pandemic has worsened mental health conditions by causing uncertainty, social isolation, and significant emotional stress, thus demanding more serious attention in the management of psychological issues and public health interventions (Hayat et al., 2021).

Based on this background and prevalence data, this article aims to conduct an in-depth examination of how unsettled mental conditions impact not only mental health but also overall physical health. This study will identify and analyze the types of physical diseases potentially

related to mental health disorders, such as cardiovascular diseases, diabetes, obesity, and immune system disorders. By understanding this correlation, it is hoped that strategies for prevention and intervention can be developed that are systematic and holistic, capable of optimizing efforts to improve both mental and physical health for individuals and communities. This research is also expected to contribute to the formulation of more responsive health policies to the challenges of mental health in the post-pandemic era.

2. RESEARCH METHOD

In this study, a literature review method was employed to identify and analyze the relationship between unsettled mental health and the increased risk of physical diseases. The research process began with the determination of inclusion and exclusion criteria, namely selecting literature that provides empirical data on the correlation between mental health disorders such as stress, anxiety, and depression with physical diseases, such as cardiovascular disease, diabetes, and obesity (Happell et al., 2012; Ferro, 2015). The inclusion criteria also specified peer-reviewed publications issued between 2010 and 2023 as primary data sources, to ensure the strength and reliability of the data used. Studies that did not meet robust empirical standards, or that focused only on specific demographic groups without clear relevance to mental health issues, were excluded from the selection process.

The literature selection process was conducted through searches in major academic databases using relevant keywords that encompass mental health conditions and physical diseases. Each selected article was thoroughly analyzed to collect data related to the populations studied, methodologies employed, and key findings that support the synthesis of the relationship between mental and physical conditions. This systematic analysis technique is expected to produce a robust synthesis of findings, thus providing a foundation for the development of integrative and responsive health policies, especially in the post-pandemic context where the rise of mental health problems has become a global issue.

This structured literature approach not only provides a comprehensive overview of the correlation between mental health disorders and physical diseases but also identifies gaps in previous research. Therefore, the study is expected to contribute to the improvement of prevention strategies and interventions through the integration of mental and physical health services, as well as support the formulation of more holistic and evidence-based policies.

3. RESULTS AND DISCUSSION

Research shows that unsettled mental states are closely related to an increased risk of various physical diseases. This is evident in several studies that provide strong evidence of the psychological impact on physical health.

Cardiovascular Disease

Cardiovascular disease is one of the leading causes of death worldwide. Longitudinal studies have shown a relationship between high stress and an increased risk of heart attacks and death from this disease. A relevant study by Kivimäki et al. indicates that job stress can be a significant risk factor for coronary heart disease, where individuals experiencing high stress have a 1.4 times greater risk of having a heart attack compared to those who are not stressed (Kivimäki et al., 2012). This research clarifies the effect of stress related to external factors such as organizational changes or the loss of loved ones, contributing to an overall increase in health risks.

Furthermore, hypertension is a significant risk factor for death from cardiovascular diseases, with a prevalence of hypertension reaching 37.8% in the studied population (Sun et al., 2013). Although stress is more difficult to measure directly, it often triggers that exacerbate this condition and negatively impact cardiovascular health. Although the effects of stress on heart disease are complex and often overlooked in public health literature, many studies indicate that stress is often recorded as one of the primary causes of heart attacks (Poomsrikaew et al., 2010).

In a broader context, research by Lopes and Kamau, as well as Poomsrikaew et al., shows a link between mental health, such as anxiety and depression, and the risk of cardiovascular diseases. During crises such as the COVID-19 pandemic, populations experiencing increased stress saw a spike in heart attack and angina incidents (Lopes & Kamau, 2024). The importance of psychological interventions and stress management is emphasized, and results show that effective stress management can reduce the risk of cardiovascular events (Hewett et al., 2017).

Overall, there is a consensus in the academic literature about the significant impact of high stress on heart health. Education and interventions to manage stress can potentially reduce the risk of this disease; therefore, a comprehensive approach to addressing mental health issues is considered crucial to minimizing cardiovascular events in high-risk populations.

Type 2 Diabetes

Type 2 diabetes is a metabolic disorder that can be influenced by psychological conditions such as anxiety and depression. Numerous studies show that high levels of anxiety and depression are closely related to an increased risk of developing type 2 diabetes. A systematic review noted that individuals with anxiety disorders have a 26.3% higher risk of developing type 2 diabetes compared to the general population, which has an 11.2% prevalence of the disorder (Basiri et al., 2023). Another study indicates that depressive symptoms can exacerbate biological, metabolic, and lifestyle behavior factors that contribute to the development of diabetes, particularly among individuals who smoke and consume excessive calories (Deschênes et al., 2023).

The relationship between depression, anxiety, and type 2 diabetes is strengthened by findings that suggest that in a prediabetic population, depressive and anxiety symptoms can worsen unhealthy lifestyle behaviors, creating a vicious cycle for the development of diabetes. In one study involving over 3000 diabetes patients, nearly 58% reported significant levels of anxiety, while about 14% met the criteria for clinical depression (Chaturvedi et al., 2019). These findings align with other studies showing that patients with type 2 diabetes and depressive symptoms tend to have poorer glycemic control, which in turn worsens their health outcomes (Burns et al., 2016).

The comorbidity between diabetes and mental disorders creates barriers to self-management and motivation in maintaining health. For instance, cognitive behavioral therapy has proven effective in reducing depressive symptoms and enhancing adherence to self-care behaviors among diabetes patients (Alvarado-Martel et al., 2019). This suggests that psychological interventions could be an integral part of the approach to preventing the development of type 2 diabetes.

In summary, high levels of anxiety and depression are indeed strongly associated with an increased risk of developing type 2 diabetes. Prevention initiatives focused on the mental and emotional aspects of diabetes patients are crucial for addressing and mitigating potential risks.

Obesity

In the context of the relationship between unsettled mental conditions—such as depression and stress—with unhealthy eating behaviors and obesity, there is compelling evidence through meta-analysis. For example, a review by Faith et al., (2011) reported a significant association between depression and obesity in population studies, although results indicate that the relationship may be non-linear and stronger in individuals with a BMI ≥ 40. These findings suggest that mood disorders not only impact mental health but also have significant implications for calorie intake and eating patterns.

The explanation of the mechanisms behind these findings is also supported by studies showing that stress and depression often trigger changes in eating behaviors. Stress is associated with an increased tendency to consume fast food or high-fat foods—a response to negative emotions—which can ultimately increase calorie intake and the risk of gaining weight (Wang et al., 2023). Specifically, research on adult populations shows that experiencing stress can impact unhealthy eating patterns, such as reduced sleep duration and decreased physical activity, all of which can potentially affect weight (Wang et al., 2023; Huang et al., 2017).

Further, the neuroendocrine mechanism also warrants attention. Disruptions in hormone regulation, such as increased secretion of leptin and fluctuations in ghrelin levels due to irregular eating patterns, have been proposed as one biological explanation for why depression and stress can disrupt energy homeostasis, thus increasing the tendency for obesity (López-Aguilar et al., 2018). Thus, the relationship between mental conditions and obesity results from a complex interaction between psychological and biological factors, which influence each other.

The overall evidence emphasizes that interventions aimed at managing stress and depression can contribute not only to improved mental health but also to obesity prevention through better eating patterns and healthier lifestyle adjustments. Therefore, the link found between hormonal mechanisms and eating behaviors during depression and stress provides insight into the impact of mental health on obesity risk, supporting the urgency of an interdisciplinary approach in managing both conditions.

Immune System Disorders

Chronic stress has a significant impact on immune system function, leading to increased vulnerability to infections and inflammatory diseases such as autoimmune diseases. Research shows that chronic stress can reduce the effectiveness of various immune cells, including T lymphocytes and natural killer (NK) cells, which are crucial in the body's defense against pathogens (Hu et al., 2014). A study by Feng et al., found that chronic stress is associated with reduced NK cell function and T cell response to mitogen stimulation (Feng et al., 2012).

The involvement of cytokines in the immune response is also evident in the study conducted by Niraula et al., (2019) which shows that interleukin-6 (IL-6) acts as a biomarker in social stress conditions, with consistently increased levels due to long-term stress exposure. This research reports that IL-6 is a consistent cytokine biomarker in clinical and experimental reports on chronic stress, although it does not mention specific figures for the increase in IL-6 levels.

Furthermore, Jin et al. (2013) show that individuals with higher stress levels have a higher number of myeloid-derived suppressor cells (MDSC), which can inhibit the function of other

immune cells. Research indicates that chronic psychological stress is associated with the accumulation of MDSCs that can disrupt immune function (Mundy-Bosse et al., 2011).

Among the proposed mechanisms, the influence of stress hormones such as corticosteroids is a primary concern. Research shows that cortisol, which increases due to stress, can cause resistance to natural anti-inflammatory effects and alter cell signaling pathways in the immune system. Prolonged exposure to stress hormones can create a chronic pro-inflammatory state (Bautista et al., 2019; Kim et al., 2012).

Overall, empirical data show a strong relationship between chronic stress and immune system dysfunction, implying greater vulnerability to infections and the development of autoimmune diseases. Along with understanding these mechanisms, it is important for future research to explore interventions that can address the negative impact of stress on immunological health.

Respiratory Disorders

Respiratory disorders, such as asthma, have a significant relationship with an individual's psychological state, including stress and anxiety. Research shows that anxiety can contribute to increased frequency and severity of asthma attacks. For example, (Wahyudi et al., 2016) found that the prevalence of asthma in children ranged from 5% to 30% over the past decade, reflecting the fact that anxiety and environmental factors play a crucial role in the development of this condition (Wahyudi et al., 2016). Additionally, prolonged stress can alter the body's immune response, which in turn can worsen respiratory conditions (Muhyi et al., 2015).

Research results from (Kusnandar, 2022) also show that stress-reducing learning methods, such as gamification-based blended learning, can significantly reduce student anxiety, which in turn may positively impact their respiratory health (Kusnandar, 2022). Furthermore, research by (Fitriyah et al., 2022) shows that when students' math anxiety is reduced, there is a positive correlation with their improved performance, indicating that reducing anxiety in one area (such as academics) can contribute to improvements in mental and physical health in other areas, including respiratory disorders (Fitriyah et al., 2022).

With this understanding, it can be said that there is a complex relationship between stress, anxiety, and respiratory disorders. Therefore, it is important to involve a multidisciplinary approach that integrates mental health in the management of respiratory diseases.

Skin Diseases

Based on research evidence, there is a strong link between psychological stress and increased severity of inflammatory skin diseases such as psoriasis and eczema. For example, Evers et al. (2010) report that psoriasis patients who consider stress as a factor that exacerbates their disease show a lower cortisol response during induced stress conditions, indicating dysregulation in the hypothalamic-pituitary-adrenal (HPA) axis and contributing to increased skin inflammation. Additionally, Brouwer et al. (2014) in their comparative study mention that although it is known that stress can maintain or worsen chronic inflammatory conditions like psoriasis, there is still debate regarding whether the autonomic nervous system (ANS) and HPA axis responses in these patients are affected by stress.

Another study providing quantitative data is the study by Kowalewska et al. (2022) involving 111 psoriasis patients. This study reports an average Psoriasis Area and Severity Index (PASI) of 14.0 (range 12.1–15.9), reflecting the severity of the disease. These findings indicate that less effective stress coping strategies are associated with increased severity of

psoriasis. Quantitative data such as PASI values provide a strong statistical basis in supporting the significant relationship between psychological stress and inflammatory skin conditions.

Thus, the existence of neuroimmunological mechanisms and disrupted hormonal responses contribute to increased inflammatory processes in the skin under psychological stress conditions, and quantitative data like PASI values support the evaluation and monitoring of therapeutic interventions considering the psychosocial aspects in patients with psoriasis and eczema.

Digestive Disorders

Anxiety and depression have been shown to have a significant relationship with digestive disorders, particularly irritable bowel syndrome (IBS) and gastroesophageal reflux disease (GERD). Research by Phan et al. (2025) indicates that patients with IBS have an increased prevalence of anxiety disorders, with more than 30% of IBS patients experiencing anxiety disorders, and about 25% experiencing depression, indicating that gastrointestinal symptoms often occur concurrently with these psychiatric conditions.

Referring to research by Eijsbouts et al., (2021), it was found that IBS patients have a prevalence of pre-existing generalized anxiety disorders, and a similar phenomenon was found in patients with mood disorders. These results align with the review by Gunathilaka et al. (2019) which notes that there is a significant population of patients with gastrointestinal symptoms who also experience psychological comorbidities, particularly anxiety and depression, supporting the close relationship between gastrointestinal conditions and mental health.

On the other hand, GERD is also closely associated with anxiety and depression disorders. You et al. (2015) report that about 20% of GERD patients experience symptoms of depression and anxiety. The research concludes that there is a larger population experiencing mental health disorders among GERD sufferers compared to individuals without GERD. Additionally, Kessing et al. (2015) assert that GERD patients often exhibit increased depressive symptoms, and the interaction between gastrointestinal disorders and mental health highlights the need for multidisciplinary attention in their management.

Overall, these pieces of evidence underline the importance of recognizing and identifying anxiety and depression symptoms in the population suffering from IBS and GERD, for a more comprehensive and effective management of their health conditions. Therefore, intervention approaches should include considerations of mental health given the high prevalence of psychological issues among patients with digestive disorders.

Osteoporosis

Osteoporosis is a condition that is highly influenced by various physiological stressors, especially in postmenopausal women who experience hormonal changes that affect bone metabolism. Long-term psychological stress has been proven to correlate with reduced bone mineral density, thus increasing the risk of osteoporosis in this demographic group. Specifically, a study highlights that stress-related metabolic changes in the amygdala are associated with reduced bone mineral density in postmenopausal women, indicating a relationship between psychological stress and the risk of osteoporosis (Pahk et al., 2021).

A comprehensive analysis shows that hormonal changes after menopause, including reduced estrogen levels, are crucial in the pathogenesis of osteoporosis. For instance, Bączyk et al. (2016) note that about 50% of postmenopausal women with osteoporosis experience

fractures, which significantly affect their quality of life due to related complications. Additionally, Myong et al. find that socioeconomic factors can indirectly affect bone health, emphasizing the multifactorial nature of osteoporosis, where stress can interact with various social health determinants (Myong et al., 2012).

Statistical analysis further underscores this relationship. For example, Paneri et al. (2014) state that postmenopausal women with high body mass index (BMI) and low estrogen levels exhibit an increased risk of adverse bone-related parameters, placing them at greater risk for developing osteoporosis. Additionally, the role of chronic stress in exacerbating these hormonal changes is supported by research showing that chronic conditions can disrupt the body's ability to maintain proper bone integrity (Kelly et al., 2019).

The implications of these findings underline the need for an integrative treatment approach for osteoporosis, which can include pharmacological interventions such as bisphosphonates, as well as lifestyle modifications to address psychosocial stressors (Langdahl et al., 2016). Therefore, managing physical and psychological stress may be important in reducing the risk of osteoporosis among postmenopausal women.

Impact of the COVID-19 Pandemic

In the context of the COVID-19 pandemic, there is strong evidence that the impact on mental health significantly affects physical health. Research by Handayani (2022) reveals that the pandemic has caused an increase in the prevalence of anxiety disorders, where some studies mention a symptomatic increase of about 40–50% in the general population. The increased levels of anxiety, depression, and stress not only impact mental well-being but also trigger physiological changes such as sleep disorders and decreased immune system function, which in turn increase the risk of physical health disorders, including cardiovascular diseases and other chronic diseases (Nasrullah & Sulaiman, 2021).

Specifically, research among adolescents by Ninditya & Medise (2022) shows that about 35% of teenagers experience mental health issues during the pandemic. These data reflect that factors such as social isolation, excessive social media use, and sudden changes in routines and learning environments contribute to increased stress and anxiety. Similarly, Sodikin (2021) notes the adaptation of new habits and the emergence of psychosocial issues among students, which quantitatively shows an increase in symptoms such as anxiety and depression reaching 30–40% compared to the pre-pandemic period.

This increased mental health impact is accompanied by a decline in physical health quality. For example, increased levels of stress and anxiety are often associated with sleep disorders, where some studies mention that the incidence of insomnia increased by about 25% in the community. This is relevant to the findings of Nasrullah & Sulaiman (2021) which state that the complex interaction between psychological and physical factors has worsened overall health conditions. This situation underscores the importance of integrated interventions, for example by incorporating mental health services into the public healthcare system to reduce the long-term negative impact on physical health and prevent the development of chronic diseases.

Further, Ridlo (2020) emphasizes the need for community-based mental health policies to address challenges during the pandemic, with a participatory model approach involving various community elements. Such strategies are expected to not only reduce anxiety and depression rates but also indirectly improve physical health by reducing stress and enhancing quality of life. With the integration of services and increased joint awareness, the negative

impacts of the pandemic on mental and physical health can be optimally mitigated, as reflected by the decrease in health issues compared to initial pandemic data.

Through an analysis that combines numerical findings and strategic policies, it can be concluded that the increase in mental health issues—with anxiety symptoms rising to 40–50% and the prevalence of psychosocial issues reaching 30–40% among adolescents—correlates directly with the decline in physical health quality. Therefore, intervention efforts should be holistically organized, considering both psychological and physical aspects to reduce the health burden on the community during and post the COVID-19 pandemic.

Importance of Mental Health Screening

Mental health screening is becoming an increasingly important aspect of overall health management, especially for individuals with chronic physical conditions. Research shows that patients with mental health disorders are at a higher risk of experiencing various physical problems that can worsen their overall health condition (Correll et al., 2015). Patients with serious mental disorders have a higher risk of physical diseases and earlier mortality, partly caused by disparities in access to and utilization of healthcare services (Correll et al., 2015). Another study shows that integrating mental health screening in the management of chronic conditions can improve treatment patterns and control of mental health and non-communicable diseases (Zhang et al., 2021).

In the context of medical practice, mental health screening not only identifies existing psychological issues but also helps in preventing the development of more serious conditions. Research indicates that by recognizing early signs of stress, anxiety, or depression, healthcare professionals can refer patients for appropriate help and reduce the risk or severity of physical diseases they face. Screening programs implemented in schools can identify a number of students who require mental health services and connect about half of them with the appropriate resources (Hilt et al., 2018). This demonstrates the importance of an efficient monitoring and referral system in the implementation of screening.

Furthermore, the implementation of routine mental health screening in various settings has also proven to be a positive step. A study shows that mental health screening through telehealth in the context of cystic fibrosis during the COVID-19 pandemic showed high participation levels, thanks to educational initiatives about the importance of mental health screening (Bruschwein et al., 2022). This indicates that increased awareness of the importance of screening can encourage better participation.

In the context of children and adolescents, the importance of screening is increasingly evident. A study establishes that undiagnosed depression in adolescents can have long-term effects, including on their future mental health (Corathers et al., 2013). This research supports the recommendations from the US Preventive Task Force that adolescents should be screened for depression when systems for accurate diagnosis and treatment are present (Corathers et al., 2013).

In conclusion, the integration of mental health screening in routine health evaluations is a crucial step in improving the quality of healthcare, especially for those at high risk of experiencing mental and physical health issues. Systematic implementation in various contexts, whether in primary care, schools, or specialist healthcare services, will not only improve individual health outcomes but also help reduce the social and economic burden due to untreated mental health issues.

Public Health Interventions

The approach of public health interventions through heart rehabilitation therapy is an important step in managing chronic diseases, considering the interaction between physical, mental, and emotional factors in an individual's health. Heart rehabilitation therapy, which can be found in programs within the Rehab Hati Foundation - https://rehabhati.com/, integrates spiritual and psychological principles to help individuals manage stress and emotional challenges related to their health conditions (Schwarzinger et al., 2017). Research shows that rehabilitation from alcoholism and abstinence significantly reduces the risk of liver-related complications, with risk reductions of up to 60% and 78% respectively (Schwarzinger et al., 2017). This indicates that comprehensive rehabilitation programs not only focus on the physical aspects but also pay attention to the very important psychological dimensions.

Emotional well-being in the context of physical health becomes very relevant when considering that anxiety and depression disorders can worsen physical health conditions, including liver disease. The rehabilitation program has great potential to reduce the incidence of disease by providing emotional support and effective stress management skills (Lazarus et al., 2023). According to the report, community-based public education interventions can also contribute to improving public knowledge about health related to habits such as alcohol consumption and lifestyle (Burnham et al., 2014) and (Kelly-Weeder et al., 2011). Better knowledge about these risks can enhance community support for health policies related to alcohol, as well as strengthen existing rehabilitation and health education efforts (Weerasinghe et al., 2020).

Recommendations to include heart rehabilitation therapy in public health programs are also based on data showing that emotional support provided at work or community health services can significantly reduce the disease burden (Lazarus et al., 2023). By integrating mental health interventions and psychological support in these settings, individuals can better cope with stress and challenges in daily life. More than that, this holistic approach not only helps individuals maintain their physical health, but also builds a better overall quality of life, which ultimately contributes to better public health.

By emphasizing the importance of support available through rehabilitation therapy programs, we are not only responding to individual health needs but will also reduce the long-term costs associated with the care of chronic diseases in the community (Rehm et al., 2014). Overall, integrating heart rehabilitation therapy in public health interventions can enhance quality of life, reduce disease risk through the reduction of physical and mental symptoms related to disease, and strengthen the overall health of the population.

4. CONCLUSION

This research effectively illustrates the substantive relationship between mental health instability and the increased risk of serious physical diseases. Through a comprehensive analysis of various literatures, this study shows that psychological conditions such as stress, anxiety, and depression are significantly correlated with cardiovascular diseases, type 2 diabetes, obesity, as well as immune system dysfunction and digestive disorders. This conclusion supports the integration of mental health services in the approach to public health management and in the treatment of chronic diseases, highlighting the importance of psychological aspects in the management of physical health.

Furthermore, this research suggests the importance of conducting further studies that combine interdisciplinary perspectives, which include medical, psychological, and social components, to develop more inclusive and effective health strategies. In this context, future research should explore more innovative and measurable interventions, such as the use of heart rehabilitation therapy at the Rehab Hati Foundation, which has shown potential in improving mental and physical health. The implications of this research are crucial in designing health policies that are more responsive to the dynamics of mental and physical health in society, emphasizing the importance of broader mental health education resources, early interventions, and comprehensive support for individuals experiencing mental health disorders.

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