

PSYCHIATRIC COMORBIDITY IN PATIENTS SUFFERING FROM CHRONIC MEDICAL DISEASES

Siba Sameer Faraj¹, Nazar Mohammad Mohammad Amin²,
Makwan Mohammed Abdulkareem^{3*}

¹Psychiatrist and Mental Health Specialist, Azadi Teaching Hospital, Kirkuk Directorate of Health, Kirkuk, Iraq

²Professor of Psychiatry, College of Medicine, University of Sulaimani, Sulaimani - Kurdistan Region, Iraq

³Psychiatrist and Mental Health Specialist, Hospital of Treatment Victims of Chemical Weapons, Halabja Directorate of Health, Halabja - Kurdistan Region, Iraq
E-mail: ³⁾ makwanjaff89@gmail.com

Abstract

Psychiatric symptoms are commonly distributed among general population and commonly comorbid with chronic medical diseases such as diabetes and thyroid diseases. This study aimed at discussing common mental health problems that are comorbid with chronic medical diseases in a single short paper by using different recent sources and references. This review article was conducted by using different recently published articles considering common mental health issues that are comorbid with chronic medical diseases such as diabetes mellitus, ischemic heart diseases, and thyroid diseases. Anxiety symptoms, depression, insomnia and somatization are commonly present among patients who have diabetes mellitus, thyroid disorders, hypertension, ischemic heart diseases, peptic ulcer and rheumatic illnesses.

Keywords: Mental Health Problems, Chronic Medical Diseases, Psychiatric Comorbid

1. INTRODUCTION

According to the World Health Organization (WHO), health is defined as a state of complete physical, mental, and social well-being rather than merely the lack of illness or disability (Kühn & Rieger, 2017). Whereas illness leads to significant disturbance of daily life activity and impaired functioning (Hydén, 2008). On the other hand, disease is the constellation of those painful, or disabling conditions that deviate from the normal statistical status (Rogers, 2003).

Moreover, wellness and illness are not two terminals of the same continuum, but two independent terminals. Currently, "wellness" is defined as the sense of contentment and positivity one feels about themselves and their life, while illness refers to the existence of a medical condition. These definitions are relevant to both physical and mental health, as well as overall well-being (Manderscheid et al., 2009).

According to DSM-5, mental illness is characterized by significant dysfunction in individual's cognitions, emotions, or behaviors secondary to any impairment in biological, psychological or social developmental processes (Kecmanovic, 2013).

Psychiatric symptoms are commonly distributed among general population and commonly comorbid with chronic medical diseases such as diabetes and thyroid diseases (Goldberg et al., 1977). Psychological distress spans a wide range of emotions, from everyday feelings of vulnerability, sadness, fear, and anxiety to more severe conditions such as depression, anxiety, and panic (Lennon et al., 2020). However, identifying

whether someone is experiencing appropriate distress based on the situation or if they have a mood disorder becomes challenging when medical symptoms are also present (Mayou & Hawton, 1986).

This study aimed at discussing common mental health problems that are comorbid with chronic medical diseases in a single short paper by using different recent sources and references.

2. RESEARCH METHODS

This review article was conducted by using different recently published articles considering common mental health issues that are comorbid with chronic medical diseases such as diabetes mellitus, ischemic heart diseases, thyroid diseases and etc.

3. RESULTS AND DISCUSSION

Mental health conditions pose a significant public health challenge, affecting the economy, mental well-being, and social dynamics of communities. It is anticipated that depression will surpass ischemic heart disease as the leading cause of illness globally in the near future (Tseliou et al., 2018).

The prognosis for both mental and organic illnesses is significantly worsened when they occur together, leading to higher treatment expenses and elevated mortality rates (Park et al., 2021). Many chronic organic diseases, such as peptic ulcers, ulcerative colitis, asthma, hypertension, and thyrotoxicosis, have shown a connection to consistent personality traits and psychopathology, which may be triggered by stress (Eastwood & Trevelyan, 1972). Individuals with chronic kidney disease often experience a variety of mental health issues such as depression, anxiety, and potentially even delirium. People who have reached the end stage of kidney disease experience lasting emotional discomfort because of their deteriorating health, regular dialysis sessions, reliance on others, and ongoing financial burden for their treatment, all of these aspects contribute to a higher risk of developing psychological issues (Dalal et al., 2022).

Pederson and colleagues discovered that a significant proportion of patients with ischemic heart disease may experience anxiety or depression as a comorbid condition. Depression by itself magnifies risk of non-adherence to cardiac treatment, overall poor life quality and subsequently premature death (Abdulkareem & Mohammad Amin, 2021; Kareem & Mahmood, 2022; Pedersen et al., 2021).

Numerous studies indicate that individuals with diabetes are nearly twice as likely to experience both anxiety and depression simultaneously in comparison to the rest of the population (Collins et al., 2009). Furthermore, the presence of both anxiety and hypertension can lead to difficulties with following treatment plans, hindered ability to perform daily activities, decreased satisfaction with life, and increased expenses for medical care. The link between high blood pressure and feeling low can be attributed to the irregularity and overstimulation of the nervous system and the hypothalamic-pituitary-adrenal axis (Fernald et al., 2021).

Furthermore, an association between thyroid dysfunction (whether hypo or hyper thyroid) and psychiatric conditions (Thvilum et al., 2014). Several researches demonstrated that hyperthyroid patients suffer from mood and cognitive symptoms as

irritability, anxiety, poor concentration, and forgetfulness (Yuan et al., 2019; Zader et al., 2019).

Anxiety is prominent feature of many psychiatric disorders. In 1895, Freud divided anxiety into two groups. First group included those with psychological symptoms of anxiety and named them as anxiety neurosis whereas the second group reserved for those with somatic anxiety symptoms and named them anxiety hysteria (Harrison et al., 2017).

Anxiety disorders are among the most prevalent mental health disorders globally, with a median lifetime prevalence ranging from 14.3% to 20% and a 12-month prevalence of 8.3%. While anxiety disorders typically have a persistent nature, it is fortunate that the prevalence of these disorders decreases as individuals age (Bandelow & Michaelis, 2015; Faraj et al., 2023; Kogan et al., 2016).

Anxiety disorders that are not properly diagnosed or missed may lead to multiple unnecessary and potentially invasive diagnostic procedures such as coronary angiography and unnecessary consultations with other specialists like gastroenterologists and cardiologists, as well as frequent visits to the emergency department in search of nonexistent physical conditions (Olariu et al., 2015).

Major depression is a prevalent and severe psychiatric condition that involves the onset of repeated major depressive episodes, while episodes that include periods of elevated mood (hypomanic or manic episodes) are classified as bipolar disorders (Mann, 2005). Main symptoms of depressive disorders are depressed mood which is the most prominent symptom, negative thoughts, diminished pleasure, decreased vitality, and sluggishness (Abdulkareem, 2023; Harrison et al., 2017). Depression is prevalent in around 13-40% percent of older people (Shahpesandy, 2005). Depression rates among those with chronic medical conditions vary, with COPD at 24.6%, gouty arthritis at 20%, rheumatoid arthritis at 15%, SLE at 22%, stroke at 30%, asthma at 27%, and atopic dermatitis at 5% (Wang et al., 2017).

Somatization is when mental or emotional distress is manifested through physical symptoms that have no clear medical cause. People often go to their primary care doctor with many ongoing unexplained physical complaints (Kurlansik & Maffei, 2016). Somatic symptom disorder greatly impacts the quality of life for individuals and places a heavy burden on the healthcare system through increased expenses, numerous visits to medical professionals, and various diagnostic tests. Unfortunately, most of affected patients refuse to receive psychiatric services, thus making it run in a chronic disabling course of disease (Hüsing et al., 2021).

Patients with somatic symptom disorders frequently pose challenges in terms of diagnosis and treatment. They may or may not have a physiological condition, however, they typically utilize a substantial amount of healthcare services and incur significant expenses as a result (Minhas & Nizami, 2006).

Insomnia refers to difficulties in initiating, maintaining sleep and/or early awakening at the morning along with poor subjective sleep quality with impaired daytime performance in spite of the adequate opportunity and circumstances for sleep (Mayer et al., 2021). Insomnia often happens alongside other physical or mental health issues. Individuals with chronic medical conditions like respiratory issues, heart diseases, chronic pain, and neurological disorders are more likely to experience insomnia (Porwal et al., 2021).

4. CONCLUSION

The current research found that a significant number of patients experience mental symptoms along with physical illnesses, yet these conditions often go unrecognized and untreated. There is a need to increase awareness among doctors in various medical fields, as highlighted by this problem.

To be more specific, anxiety symptoms, depression, insomnia and somatization are commonly present among patients who have chronic medical diseases such as diabetes mellitus, thyroid disorders, hypertension, ischemic heart diseases, peptic ulcer and rheumatic illnesses.

Psychiatrists and other mental healthcare providers must be aware of this high level of comorbidity between mental disorders and chronic medical diseases, and must be born in mind whenever evaluating and managing such patients in order to choose the best treatment plan including referrals to the involved agencies and specialties.

In addition, the availability of multidisciplinary teams and regular case discussion meetings among different medical specialties are promising ways to further improve management techniques.

Moreover, simple life style modification factors usually have positive impact on both mental disorders and chronic medical diseases, such as regular daily walking, limiting alcohol, and avoiding smoking. Sleep problems might be managed non-pharmacologically by avoiding daytime sleep, drinking milk derivatives at evening, bathing at evening and limiting caffeinated beverages.

REFERENCES

- Abdulkareem, M. M. (2023). Brain Magnetic Resonance Imaging Findings in Patients with Depressive Disorders. *OSP Journal of Radiology 2: JOR*, 2(106).
- Abdulkareem, M. M., & Mohammad Amin, N. M. (2021). Adherence to Medication for Schizophrenia in a Psychiatric Outpatient Clinic in Sulaimani. *Arab Journal of Psychiatry*, 32(2).
- Bandelow, B., & Michaelis, S. (2015). Epidemiology of anxiety disorders in the 21st century. *Dialogues in Clinical Neuroscience*, 17(3), 327–335.
- Collins, M. M., Corcoran, P., & Perry, I. J. (2009). Anxiety and depression symptoms in patients with diabetes. *Diabetic Medicine*, 26(2), 153–161.
- Dalal, P. K., Kar, S. K., & Agarwal, S. K. (2022). Management of Psychiatric disorders in patients with chronic kidney diseases. *Indian Journal of Psychiatry*, 64(Suppl 2), S394–S401.
- Eastwood, M. R., & Trevelyan, M. H. (1972). Relationship between physical and psychiatric disorder. *Psychological Medicine*, 2(4), 363–372.
- Faraj, S. S., Mohammad Amin, N. M., & Abdulkareem, M. M. (2023). Psychiatric morbidity among patients visiting Internal Medicine outpatient clinic in Sulaimani city. *Arab Journal of Psychiatry*, 34(2).
- Fernald, F., Snijder, M., van den Born, B.-J., Lok, A., Peters, R., & Agyemang, C. (2021). Depression and hypertension awareness, treatment, and control in a multiethnic population in the Netherlands: HELIUS study. *Internal and Emergency Medicine*,

- 1–9.
- Goldberg, D., Kay, C., & Thompson, L. (1977). Psychiatric morbidity in general practice and the community. *Psychological Medicine*, 6(4), 565–569.
- Harrison, P. J., Cowen, P., Burns, T., & Fazel, M. (2017). *Shorter Oxford textbook of psychiatry*. Oxford university press.
- Hüsing, P., Löwe, B., Hartman, T. C. O., Frostholm, L., & Weigel, A. (2021). Helpful explanatory models for somatoform symptoms (HERMES): study protocol of a randomised mixed-methods pilot trial. *BMJ Open*, 11(3), e044244.
- Hydén, L. (2008). Illness and narrative. *Sociology of Health & Illness*, 19(1), 48–69.
- Kareem, M. M. A., & Mahmood, H. N. (2022). Adherence to pharmacological treatment among patients with schizophrenia. *Iraqi National Journal of Medicine*, 4(1), 31–42.
- Kecmanovic, D. (2013). The DSM-5 definition of mental disorder. *Australian & New Zealand Journal of Psychiatry*, 47(4).
- Kogan, C. S., Stein, D. J., Maj, M., First, M. B., Emmelkamp, P. M. G., & Reed, G. M. (2016). The classification of anxiety and fear-related disorders in the ICD-11. *Depression and Anxiety*, 33(12), 1141–1154.
- Kühn, S., & Rieger, U. M. (2017). Health is a state of complete physical, mental and social well-being and not merely absence of disease or infirmity. *Surgery for Obesity and Related Diseases*, 13(5), 887.
- Kurlansk, S. L., & Maffei, M. S. (2016). Somatic symptom disorder. *American Family Physician*, 93(1), 49–54A.
- Lennon, O., Ryan, C., Helm, M., Moore, K., Sheridan, A., Probst, M., & Cunningham, C. (2020). Psychological distress among patients attending physiotherapy: A survey-based investigation of Irish physiotherapists' current practice and opinions. *Physiotherapy Canada*, 72(3), 239–248.
- Manderscheid, R. W., Ryff, C. D., Freeman, E. J., McKnight-Eily, L. R., Dhingra, S., & Strine, T. W. (2009). Peer reviewed: evolving definitions of mental illness and wellness. *Preventing Chronic Disease*, 7(1).
- Mann, J. J. (2005). The medical management of depression. *New England Journal of Medicine*, 353(17), 1819–1834.
- Mayer, G., Happe, S., Evers, S., Hermann, W., Jansen, S., Kallweit, U., Muntean, M.-L., Pöhlau, D., Riemann, D., & Saletu, M. (2021). Insomnia in neurological diseases. *Neurological Research and Practice*, 3, 1–12.
- Mayou, R., & Hawton, K. (1986). Psychiatric disorder in the general hospital. *The British Journal of Psychiatry*, 149(2), 172–190.
- Minhas, F. A., & Nizami, A. T. (2006). Somatoform disorders: perspectives from Pakistan. *International Review of Psychiatry*, 18(1), 55–60.
- Olariu, E., Forero, C. G., Castro-Rodriguez, J. I., Rodrigo-Calvo, M. T., Álvarez, P., Martín-López, L. M., Sánchez-Toto, A., Adroher, N. D., Blasco-Cubedo, M. J., & Vilagut, G. (2015). Detection of anxiety disorders in primary care: A meta-analysis of assisted and unassisted diagnoses. *Depression and Anxiety*, 32(7), 471–484.
- Park, S., Kim, G.-U., & Kim, H. (2021). Physical comorbidity according to diagnoses and sex among psychiatric inpatients in South Korea. *International Journal of Environmental Research and Public Health*, 18(8), 4187.
- Pedersen, S. S., Andersen, C. M., Ahm, R., Skovbakke, S. J., Kok, R., Helmark, C., Wiil,

- U. K., Schmidt, T., Olsen, K. R., & Hjelmberg, J. (2021). Efficacy and cost-effectiveness of a therapist-assisted web-based intervention for depression and anxiety in patients with ischemic heart disease attending cardiac rehabilitation [eMindYourHeart trial]: a randomised controlled trial protocol. *BMC Cardiovascular Disorders*, 21, 1–10.
- Porwal, A., Yadav, Y. C., Pathak, K., & Yadav, R. (2021). An update on assessment, therapeutic management, and patents on insomnia. *BioMed Research International*, 2021(1), 6068952.
- Rogers, W. (2003). We still need to ask 'what is disease?'. *Journal of Health Services Research & Policy*, 8(4), 245–247.
- Shahpesandy, H. (2005). Different manifestation of depressive disorder in the elderly. *Neuroendocrinology Letters*, 26(6), 691–695.
- Thvilum, M., Brandt, F., Almind, D., Christensen, K., Brix, T. H., & Hegedüs, L. (2014). Increased psychiatric morbidity before and after the diagnosis of hypothyroidism: a nationwide register study. *Thyroid*, 24(5), 802–808.
- Tseliou, F., Donnelly, M., & O'Reilly, D. (2018). Screening for psychiatric morbidity in the population-a comparison of the GHQ-12 and self-reported medication use. *International Journal of Population Data Science*, 3(1).
- Wang, J., Wu, X., Lai, W., Long, E., Zhang, X., Li, W., Zhu, Y., Chen, C., Zhong, X., & Liu, Z. (2017). Prevalence of depression and depressive symptoms among outpatients: a systematic review and meta-analysis. *BMJ Open*, 7(8), e017173.
- Yuan, L., Zhang, Y., Luan, D., Xu, X., Yang, Q., Zhao, S., & Zhou, Z. (2019). Reversible affective symptoms and attention executive control network impairment following thyroid function normalization in hyperthyroidism. *Neuropsychiatric Disease and Treatment*, 3305–3312.
- Zader, S. J., Williams, E., & Buryk, M. A. (2019). Mental health conditions and hyperthyroidism. *Pediatrics*, 144(5).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).