

Comorbid Mental and Somatic Disorders: The Two Sides of the Coin

Ljiljana Trtica Majnaric^{1,2*}, Sanja Bekic¹ & Igor Filipcic³

¹*Faculty of Medicine, Department of Internal Medicine, Family Medicine and the History of Medicine, University of Osijek, Osijek, Croatia*

²*Faculty of Dental Medicine and Health, Department of Public Health, University of Osijek, Osijek, Croatia*

³*Faculty of Dental Medicine and Health, Department of Psychiatry, University of Osijek, Osijek, Croatia*

***Correspondence to:** Dr. Ljiljana Trtica Majnaric, Faculty of Medicine, Department of Internal Medicine, Family Medicine and the History of Medicine and Faculty of Dental Medicine and Health, Department of Public Health, University of Osijek, Croatia.

Copyright

© 2019 Dr. Ljiljana Trtica Majnaric, *et al.* This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Received: 25 March 2019

Published: 29 March 2019

Keywords: *Mental Disorders; Somatic Disorders; Comorbidity; Age-Related Differences*

Abstract

The dominant current approaches in organisation of healthcare services manage somatic and mental diseases separately from each other. The growing body of evidence suggests that there is a close relationship between these two major groups of diseases at the genetic, pathophysiology and socio-psychological levels, which implies the need for more integrative approaches in screening, prevention and medical care of chronic diseases. On the other hand, recent studies indicate significant differences in clinical expression of mental diseases between younger and older patients. In this short review, we discuss these discrepancies and their impact on healthcare services organisation.

Introduction

Severe psychiatric conditions usually appear in adolescence or early adulthood and continue to last into a

later life [1]. Their appearance is strongly influenced by the genetic factors, the quality of relationships within the family members during the early mental development and the personality traits, as well [2]. After years of duration, clinical expression of these diseases may be changed, being influenced by psychiatric medications and cognitive and emotional changes due to the accompanying somatic comorbidities, aging process and the effects of a psychiatric disease by its own, on the brain and behavior. However, some people experience mental disorders for the first time in older age, usually about the age of 60. The most often of these disorders include general anxiety and depression, which usually appear in the context of physical and neurological illnesses [2,3]. These mental disorders are less severe, than the early-onset psychiatric diseases, but their diagnostics and treatment are still challenging, because of their significant contribution to the adverse functional, social and health outcomes of older people [4,5]. Thus, regardless of the fact that both groups of mental disorders, that of the early-onset and that of the late-onset, appear in combination with somatic comorbidities, their clinical expression may be fairly different, requiring different approaches in early diagnostics, monitoring and healthcare organization.

Somatic Comorbidity in Psychiatric Patients

Somatic comorbidity in psychiatric patients has received increasing attention of researchers in the last decades, as a result of the observations that patients with psychiatric diseases, including schizophrenia, bipolar disorder and major depression, have higher mortality rates and die earlier on than people in general population [6]. An unexpected finding was that a reduced life expectancy is due to the natural causes of death, rather than to suicide, medication overdose or other types of violent deaths, which are usually attributed to psychiatric patients [7]. This premature mortality of psychiatric patients is mostly attributed to cardiovascular disease (CVD), chronic respiratory disease (CRD), type 2 diabetes (DM2) and cancer, which are also the common causes of death in general population. As the mechanisms underlying increased risk for developing these diseases, the adverse side-effects of the pharmacological treatment and poor lifestyles, due to self-neglect and emotional and cognitive changes of psychiatric patients, have been proposed [8]. Both factors, a long term use of psychiatric medications and poor lifestyles, including smoking, poor diet habits and low physical activity, are known as to be associated with overweight, hyperglycemia and dyslipidemia, thus giving contribution to the risk for developing common somatic diseases, such as the metabolic syndrome and CVD. In psychiatric patients, the access to preventive interventions, early diagnostics and treatment, is usually lower than in other patients, which can also contribute to their higher morbidity and mortality rates. In addition, recent studies indicate that some psychiatric and somatic diseases share common genetic background and biological mechanisms, including neuro-endocrine, vascular and inflammation pathways. Based on these evidence, many psychiatrists claim for more collaborative and integrative approaches in healthcare services, where more attention would be paid to physical health needs of psychiatric patients [9].

Multimorbidity and Mental Disorders in Older Population

In parallel to the expansion of research on somatic comorbidities in psychiatric patients, in the last decades, a similar concept has emerged in geriatrics research, that on mental disorders in older patients with multimorbidity [10]. The term multimorbidity indicates the presence of two or more chronic diseases in the same person [3]. The prevalence of this condition in a population significantly increases after the age of

60, that is, in a period of life when chronic diseases start to accumulate. Multimorbidity is associated with increased risk for negative health outcomes, in particular when physical frailty and/or mental and cognitive impairments take part in multimorbidity [11-13]. Cognitive function impairment is based on the biological background of vascular atherosclerotic changes and degenerative brain changes, due to the aging process and accumulation of somatic comorbidities [12]. Both, somatic and cognitive disorders, provide the biological and psychological background for anxiety and/or depression to appear as comorbidities [14,15]. Since affective reactions of older people are decreased, symptoms of these mental disorders are usually gentle and share between somatic and cognitive complaints [4,16]. Although gentle and often unrecognisable by the clinicians, the presence of mental disorders, in older patients, has been showed to undermine their health status and facilitate the progression of somatic chronic diseases and physical disability [2]. Taken together, this discussion indicates that the relationships between somatic and mental disorders, in older people, compared to the younger ones, are somewhat different, as the other side of the coin. Somatic comorbidities dominate in their health status and mental disorders are of less intensity and therefore more difficult to be recognized.

Conclusions

The coexistence of mental and somatic medical conditions is common and associated with high risk for the development of functional impairment, high healthcare costs and excess mortality. The current fragmentation of medicine into numerous specialties is the main reason that these conditions are managed mostly separately. The management of patients with multimorbidity is difficult and require multiple secondary care specialists communicating with the primary care providers. A reorientation of the current healthcare into models that would allow more integrated approaches is necessary. However, the evidence of how to realise this is limited. Strengthening the public health approaches in managing these patients would be a priority. Another factor that could help our efforts to improve management and outcomes of these patients is to pay more attention on differences that exist in biological background, clinical expression and medical needs between dominantly psychiatric patients having somatic comorbidities and older patients with dominated somatic comorbidities, who also have mental disorders. Different approaches for these two groups of patients are needed in research, management and information sharing within the healthcare system.

Bibliography

1. Hoyt, L. T. & Chase-Lansdale, P. L. (2012). McDade TW, Adam EK. Positive youth, healthy adults: does positive wellbeing in adolescence predict better perceived health and fewer risky health behaviors in young adulthood? *J Adolesc Health.*, 50(1), 66-73.
2. Fiske, A., Wetherell, J. L. & Gatz, M. (2009). Depression in older adults. *Annu Rev Clin Psychol.*, 5, 363-389.
3. Lenze, E. J., Mulsant. B. H., Shear, M. K., Alexopoulos, G. S., Frank, E. & Reynolds, C. F. 3rd. (2001). Comorbidity of depression and anxiety disorders in later life. *Depress Anxiety.*, 14(2), 86-93.
4. Piazza, J. R., Charles, S. T. & Almeida, D. M. (2007). Living with chronic health conditions: age differences in affective well-being. *J Gerontol B Psychol Sci Soc Sci.*, 62(6), 313-321.

5. Blackburn, P., Wilkins-Ho, M. & Wiese, B. S. (2017). Depression in older adults: diagnosis and management. *BC Med J*, 59(3), 171-177.
6. Walker, E. R., McGee, R. E. & Druss, B. G. (2015). Mortality in mental disorders and global disease burden implications: a systematic review and meta-analysis. *JAMA psychiatry*, 72(4), 334-341.
7. Smith, D. J., Langan, J., McLean, G., Guthrie, B., Mercer, S. W., et al. (2013). Schizophrenia is associated with excess multiple physical-health comorbidities but low levels of recorded cardiovascular disease in primary care: cross-sectional study. *BMJ Open*, 3(4), e002808.
8. Laursen, T. M., Nordentoft, M. & Mortensen, P. B. (2014). Excess early mortality in schizophrenia. *Ann rev clin psychol*, 10, 425-448.
9. Dieset, I., Andreassen, O. A. & Haukvik, U. K. (2016). Somatic comorbidity in schizophrenia: some possible biological mechanisms across the life span. *Schizophr Bull*, 42(6), 1316-1319.
10. Sartorius N. (2018). Comorbidity of mental and physical disorders: a key problem for medicine in the 21st century. *Acta Psychiatr Scand*, 137(5), 369-370.
11. Onder, G., Palmer, K., Navickas, R., Jurevičiene, E., Mammarella, F., Strandzheva, M., et al. (2015). Time to face the challenge of multimorbidity. A European perspective from the joint action on chronic diseases and promoting healthy ageing across the life cycle (JA-CHRODIS). *Eur J Intern Med*, 26(3), 157-159.
12. Wilkins, C. H., Mathews, J. & Sheline, Y. I. (2009). Late life depression with cognitive impairment: evaluation and treatment. *Clin Interv Aging*, 4, 51-57.
13. Vaughan, L., Corbin, A. L. & Goveas, J. S. (2015). Depression and frailty in later life: a systematic review. *Clin Interv Aging*, 10, 1947-58.
14. Rea, I. M., Gibson, D. S., McGilligan, V., McNerlan, S. E., Alexander, H.D. & Ross, O.A. (2018). Age and age-related diseases: role of inflammation triggers and cytokines. *Front Immunol*, 9, 586.
15. Li, L. W. & Conwell, Y. (2009). Effects of changes in depressive symptoms and cognitive functioning on physical disability in home care elders. *J Gerontol a Bio Sci Med Sci*, 64A(2), 230-236.
16. Balash, Y., Mordechovich, M., Shabtai, H., Giladi, N., Gurevich, T. & Korczyn, A. D. (2013). Subjective memory complaints in elders: depression, anxiety or cognitive decline? *Acta Neurol Scand*, 127(5), 344-350.