

Improving Physical Health in Patients with Severe Mental Illness

During the past decades in Taiwan, we had several important mental health policies, such as Mental Health Network (1986), Mental Health Acts (1990, 2000, 2002, and 2007), National Health Insurance (1994), Psychiatric Hospital Accreditation (1999) through Joint Commission of Taiwan, as well as the establishment of Department of Mental and Oral Health under the Ministry of Health and Welfare (2013). All those crucial milestones have effectively been achieving the high standard for mental health care in Taiwan. Psychiatric care qualities in both the hospitals and the community have greatly been promoted.

Severe Mental Illness Patients Are at Risk for Various Physical Illnesses

As those patients with severe mental illness (SMI) are reaching increasing advanced ages as a consequence of improved treatment possibilities for years, we have to face, in those SMI patients' later life, newly emerging challenges – the aging problems and physical comorbidities. SMI patients have a shorter life expectancy than those in the general population, and they are more vulnerable to have several physical illnesses, including diabetes, coronary heart disease, hypertension, and emphysema [1-3]. In addition, SMI patients often have poorer diets, lower rates of physical activity, higher rates of smoking, as well as greater use of alcohol and street drugs than those in the general population. Furthermore, such lifestyle choices predispose them to have physical health problems. What's more, antipsychotic drugs have been associated with other potentially bad side effects, including prolactin elevation, cataract formation, movement disorders, and sexual dysfunction [4].

Of the few studies to measure outcome, SMI patients from public mental health agencies in eight states of the United States of America from 1997 to 2000 have shown to have life expectancies generally reduced by 13 to more than 30 years (depending on the year and state) compared to those in the general population [5]. In addition, recent reports also suggested that life expectancy generally is shortened by about 10 years in SMI patients [6]. But until now, no systemic studies exist on the physical states of SMI patients in their later life.

SMI patients are reported to be prone to metabolic syndrome. Metabolic syndrome has a potentially reversible constellation of cardiovascular (CV) risk factors including diabetes, hypertension, obesity, and dyslipidemia [7]. Those findings may explain the higher incidence of CV diseases in SMI patients. The high prevalence of metabolic syndrome seen in SMI patients is partially due to the use of

various antipsychotic drugs, especially second-generation antipsychotic drugs (SGAs).

Meanwhile, the different side effects from various SGAs have been reported to be associated with the mortality of SMI patients. Taylor et al. [8] compared the reasons between discontinuing clozapine and discontinuing long-acting risperidone injection in age-matched individuals treated in the same clinical setting. The investigators found that clozapine use in SMI patients has been associated with a remarkably increased risk of death because clozapine has more serious adverse effects causing an increased risk of death [8]. But clozapine remains the treatment of choice for treatment-refractory schizophrenia despite its association with more (trivial or life-threatening) adverse effects. The frequency and various effects are expected to lead to relatively higher mortality in those clozapine-medicated SMI patients than those treated with other SGAs.

Physical Health in Severe Mental Illness Patients Is a Global Public Health Issue

The physical health of SMI patients is often neglected, contributing to an egregious health disparity. The reintegration of psychiatric and nonpsychiatric medical care with the ultimate goal of giving optimal services to those vulnerable SMI patients is one of the most important challenges facing psychiatry today [1].

Hence, the protection and promotion of physical health in SMI patients are emerging as a global public health issue with ethical relevance. Access to physical health care of the same quality as that available to the rest of the population is a basic right of patients with schizophrenia [9]. From this viewpoint, good care strategies for older SMI patients, both physically and mentally, will be an important symbol of outstanding medical quality for all of us.

Impaired physical health state is common in older SMI patients. One report used various somatic parameters as a basis to investigate the physical health of the elderly aged over 60 years with SMI ($n = 99$) in a large Dutch mental institute [10]. The investigators found that somatic comorbidities (84.8%), use of somatic medications (77.7%), and use of polypharmacies (67.7%) are prevalent, that extrapyramidal symptoms are experienced by 51.0% of patients, that unhealthy diet has been reported in 16.2%, obesity in 27.3%, and physical inactivity in 57.6%, as well as that fatigue (67.7%) and dry mouth (66.6%) have been the most frequently reported physical symptoms [10].

Another report based on a large mental institute in Eastern Taiwan showed that four main physical diagnoses have been

(a) gastrointestinal complaints ($n = 129$, 23.1%); (b) lung problems ($n = 119$, 21.3%); (c) fever/infection ($n = 99$, 17.7%); and (d) fall/fracture ($n = 53$, 9.5%) [11]. The investigators also found that, for older SMI patients, the major complaints of gastrointestinal tracts are constipation combined with intestinal obstruction and gastrointestinal bleeding, that pneumonia is an often and serious problem, especially for those under poor physical health condition, and that cellulitis is another common, trouble clinical problem for those patients [11]. Those physical problems have caused much challenge for the staff. In addition, fall and fracture can always induce a complicated clinical course to develop the vicious cycle faster [11].

Clearly, the mechanisms through which mental disorders are associated with premature mortality include the effects of individual risk factors (e.g., diabetes and hypertension) and other factors (e.g., direct effects of mental distress on CV risks). Mental disorders associated with excess mortality have been shown to be predominantly caused by “natural” causes [3, 12, 13]. But further research into those findings is needed to explore the underlying factors. If improving overall survival rates is to be considered as an alternative priority, much more effort is required to address the challenges of improving general health in SMI patients through medical service, socioeconomic support, and physical health promotion strategies [14].

The Challenges of Improving Physical Health in Severe Mental Illness Patients

Previous strategies for preventing premature death among SMI patients have been suggested to stress the management of suicide risk and physical illness, to minimize polypharmacy, and to improve accessibility to physical health care [14]. Despite healthcare improvements, little evidence exists for showing a beneficial effect on life expectancy in SMI patients. But well-designed physical health monitoring programs for SMI patients may prolong their life expectancy.

SMI patients are at risk of medical complications, including CV disease, metabolic syndrome, and diabetes. Given this vulnerability, combined with metabolic risks of SGAs, physical monitoring is critical. Inpatients' admission is an opportunity to screen for medical comorbidities. Ross et al. have used electronic standardized order set as a tool to improve screening for physical health comorbidity in SGA-medicated SMI patients [15]. Furthermore, Houben et al. have tried to reduce morbidity and premature mortality in those frail SMI patients. It is essential that healthcare providers are aware of high prevalence of somatic comorbidity and symptoms and of their interactions with psychiatric disorders. To early detect physical comorbidities can improve long-term health outcomes of older SMI patients [10]. Although life expectancy is shortened, the number of geriatric SMI patients is increasing, requiring special attention to give outpatient psychosocial care, self-management of somatic diseases, and to age-appropriate continuation of psychiatric treatment. Older SMI patients need special attention in their diagnostic workup,

and geronto-psychiatric treatment facilities are helpful in the interdisciplinary therapy [6].

From a public health perspective, the need to integrate mental and physical healthcare is indisputable. Clinicians know that the life expectancy of SMI patients is shortened than the general population highly due to physical ill health and that the gap of mortality is still widening in spite of current managements [16]. At the same time, an increasing portion of patients with chronic physical conditions is still diagnosed with mental conditions and medically unexplained symptoms.

Many barriers still exist and need to be broken through. Those barriers are caused through fragmentation of health care services, lack of education, and commissioning, leading to patient' substantial consequences, including worse experience of care, outcomes, and identification of health needs. Hence, systematic approaches to integrating care are needed to reduce health inequalities, fragmentation of health care services, lack of education, and economic costs of mental and physical health comorbidities [16].

In 2019, the Lancet Psychiatry Commission presented clear directions for health promotion, clinical care, and future research. As the range and multifactorial nature of physical health are wide and complicated, the Commission addressed five parts to reach its aims [17]:

- Physical health disparities for people with mental illness
- Key modifiable factors in health-related behaviors and health services
- Interplay between psychiatric medications and physical health
- Multidisciplinary approaches to multi-morbidity
- Innovations in integrating physical and mental healthcare.

The Lancet Psychiatry Commission has set a blueprint for protecting physical health in people with mental illness.

Conclusion

The poor physical health conditions in those SMI patients raise many discussions for all professionals in the fields of mental health in recent years. The physical comorbidities of SMI patients are multidimensional, complicated, and global problems. Access to physical healthcare of the same quality as other general people is the basic human rights with ethical relevance for SMI patients.

Improving physical health in SMI patients should be sincerely considered as a global priority to improve the lifelong burden of patient, family, and society. As a newly elected president and appointed secretary-general of the Taiwanese Society of Psychiatry 2019–2021, respectively, the authors hope that all society members need to continue our ongoing efforts to improve the physical health care quality for SMI patients. We believe that our collective efforts by all members of the Taiwanese Society of Psychiatry have the chance to improve the physical health inequity and to prevent premature mortality in SMI patients in Taiwan in the future.

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Conflicts of Interest

The authors declare no conflicts of interest in writing this editorial.

References

1. Fleischhacker WW, Cetkovich-Bakmas M, de Hert M, et al.: Comorbid somatic illnesses in patients with severe mental disorders: clinical, policy, and research challenges. *J Clin Psychiatry* 2008; 69: 514-9.
2. Marder SR, Essock SM, Miller AL, et al.: Physical health monitoring of patients with schizophrenia. *Am J Psychiatry* 2004; 161: 1334-49.
3. Pack S: Poor physical health and mortality in patients with schizophrenia. *Nurs Stand* 2009; 23: 41-5.
4. Chang CK, Hayes RD, Perera G, et al.: Life expectancy at birth for people with serious mental illness and other major disorders from a secondary mental health care case register in London. *PLoS One* 2011; 6: e19590.
5. Colton CW, Manderscheid RW: Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. *Prev Chronic Dis* 2006; 3: A42.
6. Kopf D, Hewer W: Somatic risks in elderly people with severe psychiatric illness. *J Gerontol Geriatr* 2018; 51: 779-84.
7. Khatana SA, Kane J, Taveira TH, et al.: Monitoring and prevalence rates of metabolic syndrome in military veterans with serious mental illness. *PLoS One* 2011; 6: e19298.
8. Taylor DM, Douglas-Hall P, Olofinjana B, et al.: Reasons for discontinuing clozapine: matched, case-control comparison with risperidone long-acting injection. *Br J Psychiatry* 2009; 194: 165-7.
9. Maj M: Physical health care in persons with severe mental illness: a public health and ethical priority. *World Psychiatry* 2009; 8: 1-2.
10. Houben N, Jassen EPCJ, Hendriks MRC, et al.: Physical health status of older adults with severe mental illness: The PHISMI-E cohort study. *Int J Ment Health Nurs* 2019; 28: 457-67.
11. Lee SM, Liu YL, Kung FC, et al.: A study of delivering and monitoring project of acute physical health issues in a large psychiatric institute. *The Proceedings of the 49th Anniversary of the Taiwan Society of Psychiatry*, Taipei, Taiwan: Taiwanese Society of Psychiatry, 2010.
12. Tsuang MT, Woolson RF: Mortality in patients with schizophrenia, mania, depression and surgical conditions. A comparison with general population mortality. *Br J Psychiatry* 1977; 130: 162-6.
13. Liao CC, Shen WW, Chang CC, et al.: Surgical adverse outcomes in patients with schizophrenia: a population-based study. *Ann Surg* 2013; 257: 433-8.

14. Auquier P, Lançon C, Rouillon F, et al.: Mortality in schizophrenia. *Pharmacoepidemiol Drug Saf* 2006; 15: 873-9.
15. Ross E, Barnett R, Tudhope R, et al.: Can we improve physical health monitoring for patients taking antipsychotics on a mental health inpatient unit? *J Clin Psychopharmacol* 2018; 38: 447-53.
16. Attoe C, Lillywhite K, Hinchliffe E, et al.: Integrating mental and physical health care: the mind and body approach. *Lancet Psychiatry* 2018; 5: 387-9.
17. Firth J, Siddiqi N, Koyanagi A, et al.: The Lancet Psychiatry Commission: a blueprint for protecting physical health in people with mental illness. *Lancet Psychiatry* 2019; 6: 675-712.

Shin-Min Lee, M.D., M.S., Ph.D.^{1,2*}, Ding-Lieh Liao, M.D., Ph.D.^{3,4}

¹Department of Psychiatry, Taoyuan General Hospital, Ministry of Health and Welfare, Taoyuan, Taiwan, ²Department of Psychiatry, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan, ³Department of General Psychiatry, Taoyuan Psychiatric Center, Ministry of Health and Welfare, Taoyuan, Taiwan, ⁴Department of Health Care and Social Work, Taipei University of Marine Technology, Taiwan, New Taipei City, Taiwan

*Corresponding author. No.1492, Zhongshan Road, Taoyuan District, Taoyuan City 330, Taiwan.
E-mail: Shin-Min Lee <lee9858@ms45.hinet.net>
or <05468@mail.tygh.gov.tw>

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