What will the development of psychiatry in China be in 10 years?

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The essence of my talk is to identify the changes in psychiatric clinical services over this designated time and illustrate my personal conjecture on what the field of psychiatry will be like in 10 years' time. To put it simply, that is to tell the difference between visiting a psychiatrist today and visiting one 10 years from now.

The main pieces of a doctor's visit are the patient, the doctor, plus the space for the visit (ie, the hospital). The content of a doctor's visit is diagnosis and treatment. First, let's look at the conditions of the medical services and services of today's psychiatric departments, followed by reviewing our service status (ie, our current mental health service capacity broken into number of hospitals, hospital beds, doctors and nurses that we have for psychiatry). According to the 2015 National Mental Health Resource Survey,[1] the service capacity of psychiatry in China currently has the characteristics of 'three less and one poor'. The 'three less' signifies the insufficiency of psychiatric professional institutions, psychiatric specialist beds and psychiatric specialists, whereas 'one poor' represents that the conditions of existing psychiatric professional institutions are worse than those of general hospitals and other specialised hospitals.

At present, there are nearly 3000 mental health service institutions in China, including psychiatric specialist hospitals, general hospital psychiatry, primary healthcare institutions, general clinics, mental health clinics and rehabilitation hospitals. Among them, psychiatric specialist hospitals and psychiatric units in general hospitals account for 85% of the total number. There are only about 430 000 psychiatric beds and nearly 30 000 psychiatry specialists in China, which is far from meeting the growing needs.[1] Furthermore, there is a large shortage in the supply of specialist psychotherapists, psychological counsellors, rehabilitation physicians, social workers and public health professionals. Seventy-eight per cent of the existing psychiatric hospital beds are in specialist psychiatric hospitals. The distribution of medical resources for mental health very much reflects the economic development of China which is uneven and unbalanced.[1] The entire central and eastern regions account for 40%–50% of professional institutes, hospital beds, medical resources, doctors and nurses.[1] Therefore, the medical resources and the professional health workers are obviously insufficient in the western regions.

Now the changes in the diagnostic classification of mental illness are depicted. With the development of society, the classification of today's mental disorders has become significantly different from that of the past. According to the classification of the latest Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition,[2] the following mental disorders are covered: neurodevelopmental disorders, schizophrenia and other psychiatric disorders, bipolar spectrum disorders, depressive disorders, anxiety disorders, obsessive-compulsive disorders, trauma and stress-related disorders, dissociative disorders, somatoform disorders, feeding and eating disorders, excretory disorders, sleep arousal disorders, sexual dysfunction, gender anxiety disorder, destructive, impulse control and behavioural disorders, substance-related and addictive disorders, neurocognitive disorders, personality disorders, paraphilias and other mental disorders.

Today, the epidemiological survey of mental disorders in China shows that patients with schizophrenia are no longer the main group of mental disorders but have been replaced by patients with mood disorders, anxiety disorders and substance dependence. According to the results of the Epidemiological Survey of Mental Disorders in the Four Provinces of China published in the Lancet in 2009, the prevalence of mental disorders in China is 17.5%, in which mood disorders (including depression, bipolar disorder) is 6.1%, substance abuse 5.9%, anxiety disorders 5.6% and psychotic disorders (including schizophrenia, and so on) 1.0%.[3]

Somatic symptoms are one of the three clinical symptom dimensions of depression and anxiety disorders, and the rest are emotional and cognitive symptoms. Patients often recognise somatic symptoms as diseases and visit various departments of the general hospital looking for treatment. At the same time, the incidence of comorbid depression and anxiety disorders in patients with somatic diseases in general hospitals is increasing. For example, Parkinson's disease and tumours are often accompanied by depression and anxiety symptoms that result in comorbidities. The above two results make patients with depression and anxiety disorders mainly seek medical treatment from various departments in general hospitals, resulting in overcrowded general hospitals and increased disease burden.

With the development of mental health services and health concepts, today's mental health service capabilities and coverage have changed a lot from the past. First, psychiatric beds are not just in psychiatric hospitals, but most of the medical university affiliated hospitals (general hospitals) have psychiatric specialist wards as well. Almost all provincial and municipal comprehensive hospitals have psychiatric/psychosomatic/psychological counselling and outpatient clinics. Although under different names, these health service establishments are all providing mental health services to diagnose and treat

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mental health patients in addition to the provision of services for meeting the patients' growing needs. Second, the treatment of patients with severe psychotic disorders such as schizophrenia is not limited to hospital treatment but extends to community maintenance treatment and follow-up, thus to better promote the functional rehabilitation of patients and their re-entry into society. Third, the psychiatric service targets severe psychotic disorders, such as schizophrenia, and mild mental disorders, such as anxiety disorders, sleep disorders, eating disorders and behavioural problems. The name of the discipline has also changed from psychiatry to psychiatric medicine. Fourth, the specialist wards of psychiatric departments have also evolved from the completely closed type of the past to the open wards in some general hospitals and specialised hospitals, thus to better service the needs of the patients. The scene of visiting a psychiatrist 10 years from now will be discussed next.

First, the hospital registration hall is reviewed. At present, making appointment with the specialists in large-scale hospitals is still very difficult. Even if making an appointment online, to accomplish the appointment requires one to catch up with the commencement of the online registration, in the middle of the night. Oftentimes, the hospital registration halls are crowded with people, and queues are everywhere. There are queues for appointment registration, doctor visits, payments, medical tests and medicine collection. The situation in the general hospitals is more prominent. With the development of graded medical treatment and medical service flow technology, after 10 years, the process of visiting doctors will be characterised by appointment requirements, registration quotas, electronic payment and popularisation of robot services. Today's outpatient halls will be eliminated, and the congestion in the outpatient hall will surely become history. Instead, the hall will become a quiet, comfortable, convenient and more humane environment for medical services.

Second, the doctor's visit today and the one in ten years are compared. Today's diagnosis is based on a patient's medical history and clinical symptoms and syndrome. The disease is diagnosed by using the 'four cornerstones of diagnosis': the diagnostic criteria of symptoms, the period criteria, the severity criteria and the exclusion criteria. As scientific research advances, new discoveries continue to be reported. Ten years from now, the diagnosis of psychiatric diseases will be based more on clinical syndromes and lab tests, such as brain imaging, genetic tests, biochemical indicators, physiological indicators, psychological behaviours and functional assessment. A more accurate diagnosis of mental disorders will be achieved through a multidimensional evaluation system.

Third, the focus is on treatment. Nowadays, the treatment of mental illness is mainly by medications and, second, by physiotherapy that is mostly non-convulsive electroconvulsive therapy and the recently developed transcranial magnetic stimulation procedure. Currently, evidence-based basis in all treatment guidelines is primarily formed with information from cohort-controlled studies and meta-analyses, and the information is mostly about pharmacological treatments. With the development of science and technology, such as the research of artificial intelligence and big data, the medical treatment guidelines after 10 years may refer more to the analysis of big data. The treatment of mental illness is not limited to medication treatments but a multidimensional integrated treatment like 'treatment for hypertension and diabetes'—'package treatment', that is, a long-term and precise therapy treatment designed according to the medical state of individual patients.[4] The so-called precision therapy is to improve the therapeutic effect through targeted therapy. Starting from tumour therapeutics, precision medicine has now entered the psychiatric department and become valued widely in treating mental disorders or brain diseases. The age-old method of psychiatric diagnosis and treatment based on symptom or syndrome is bound to be replaced by precision medicine, a new method of diagnosis and treatment based on clinical symptoms/syndromes, biological markers and multidimensional assessment of life experience. Research Domain Criteria research method advocated by the National Institute of Mental Health is an example. At present, the most popular biological markers are genetic testing, brain imaging examination, brain electrophysiology examination, nerve immune examination, and so forth. In addition, it is also a good example to direct doctors to choose reasonable therapeutic drugs and assess adverse drug reactions by detecting enzymes related to drug metabolism, such as P450 enzyme lines CYP2D6 and 2c19. There are also virtual reality technologies that will be widely used in the treatment of mental disorders.[5 6]

In light of this treatment trend, patients will be hospitalised with a shorter duration, and hospitalisation will primarily be for addressing the patient's emergency and for developing long-term treatment options. In the future, the purpose of outpatient, follow-up and community maintenance therapy is to better help patients to restore their daily functions and improve their quality of life. To achieve this goal, personalised rehabilitation treatment is particularly important. Rehabilitation treatment will be prescribed to individual patients according to their insufficiency in the daily functions which include life function, social function and vocational/learning function. Treatment and rehabilitation programmes designed regarding the insufficiency in daily functions encompass independent living and social skills training, occupational therapy and vocational rehabilitation. Application of psychotherapy is also viable to improve the symptoms and cognitive function of patients with mental disorders and improve social function. In order to foster these upcoming treatment trends, a variety of resources is required to create a supportive environment for people with mental disorders; to mobilise

positive factors conducive to patient recovery; and to establish the treatment alliance as early as possible. In addition, information management and networking techniques will be essential to the follow-up and the maintenance of rehabilitation and treatment.

Fourth, the role of psychiatrists is reviewed. With the development of establishing psychiatric outpatient clinics and wards in general hospitals, the role of psychiatrists will become more prominent in general hospitals. At present, the connection between psychiatrists and other doctors is mainly consultation. With the increasing demand for psychiatric services in other disciplines, after 10 years, psychiatrists will take part actively in consultation and liaison medicine. Within hospitals, psychiatrists will be dispersed in different departments to take part in the corresponding departments' joint ward inspections and integrated treatment of patients. Furthermore, the demand for psychiatrists will continue to increase; the numbers of psychiatrists will continue to grow; and the role of psychiatrists will manifest in everyday medical services.

With the development of society, people have become more health conscious, and mental health has increasingly become an integrated part of the health concept in everyday people's lives. The scope of mental health services is greatly expanded to include the severe psychotic disorders, which is the main target of past services, such as schizophrenia, and the mild disorders, such as anxiety disorders; psychological behaviour problems, such as internet addiction; as well as conditions, such as emotional instability and irritability; as well as helping the general population to develop mental well-being.

To avail the opportunities in these mental healthcare developments, psychiatrists and healthcare workers should keep the doctor–patient relationship in good order, facilitate the establishment of patient and family alliance and strengthen the public awareness of mental health and mental illness. Furthermore, the existing network technology should be used to make available the opportunities for continuous education to the psychiatry specialist and non-specialist doctors, thus to increase the diagnosis and visit rates for those seeking services.

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