

Child psychiatry in China: Present situation and future prospects

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As in many other countries, child psychiatry in China has gradually developed from general psychiatry. In the early days of the profession, child psychiatry was considered as psychiatry for “little adults”. Child psychiatry in China has gradually developed and expanded since the implementation of Professor Guotai Tao’s child psychiatric services in Nanjing in the 1930s. In particular, the profession has developed rapidly since its affiliation with the International Association for Child and Adolescent Psychiatry and Allied Professions (IACAPAP) in 1998. Child psychiatry has been one of the fastest developing advanced international disciplines over the past 10 years.

History

Pediatric psychiatry mainly focuses on the diagnosis, treatment, and prevention of mental disorders in children, adolescents, and their families. In 1899, the term “child psychiatry” (in French) was used as a subtitle in Manheimer’s monograph *Les Troubles Mentaux de l’Enfance*. The Swiss psychiatrist Moritz Tramer (1882–1963) was probably the first to define child psychiatry, in 1933, in terms of diagnosis, treatment, and prognosis within the medical discipline. In 1934, he founded the *Journal of Child Psychiatry* (1934–1952), which later became *Acta Paedopsychiatrica* (1953–1994). The first academic pediatric psychiatry department was established

in 1930 at the Johns Hopkins Hospital in Baltimore by Leo Kanner (1894–1981). Since then, the clinical practice, research, and teaching of child psychiatry have gradually developed around the world.¹

There have been three stages to the development of children’s psychiatry in China. The first is the exploration and development period, which occurred mainly during the 1930s to the 1950s. This period was characterized by the introduction of Western models by experts and the exploratory development of child psychiatric services. Professor Yulin Cheng, Guotai Tao, and Yonghe Ling other professors are the pioneers. The second stage is the initial development period, which occurred from the 1950s to the late 1970s. Child psychiatric clinics and/or wards were established in Nanjing, Shanghai, Beijing, Guangzhou, Sichuan, Hunan and other places and child psychiatric teams were formed. Although there was a pause in the early 1970s, child psychiatric service models continued to be developed. The third period, from the late 1970s to the present, was characterized by rapid progress. The development of child psychiatry has been promoted mainly since the economic reform and opening-up in China, with the transformation of the medical model from a pure biomedical model to a biopsychosocial medical model. Psychiatrists, pediatricians, and psychologists have begun to focus on child mental health and have

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conducted some interdisciplinary research and practice. Following the establishment of the Nanjing Child Mental Health Research Center, many provinces and cities have established child mental health centers. Psychiatric hospitals or mental health institutes affiliated to major medical universities in Nanjing, Beijing, Hunan, Sichuan, Shanghai and other places have successively established Master's and doctoral training sites for child psychiatry and applied psychology. Relevant disciplines and research institutions such as child health care, behavioral pediatrics, special education schools, and autism training centers have successively joined the ranks of child mental health services. In particular, Professor Guotai Tao founded the Nanjing Child Mental Health Research Center in 1984. In August 1987, the center was appointed by the World Health Organization (WHO) as a scientific research and training cooperation center, and was appointed by the Chinese Ministry of Health (now the National Health Commission) as a child mental health guidance center. Many child psychiatrists and mental health workers have been trained, and academic exchanges have been promoted in China and abroad.²

Advances in clinical practice and research

Multidisciplinary participation

With the rapid development of disciplines, Chinese child psychiatry has reached an internationally renowned and advanced level. Multidisciplinary participation in child psychiatry is good. For example, the psychology of child development, developmental behavior pediatrics, child neurology, child health care, education, and sociology have begun to attach importance to clinical practice and research on mental health. A growing number of universities and colleges offer degrees for social workers in clinical psychology and childcare. In addition, with more primary care centers in the community, primary care physicians can implement screening and follow-up for children with mental health disorders. However, the primary care providers still need more education and training. To address this problem, the National Health Commission has been advocating multilevel collaboration. Pediatricians and primary care physicians across the country are now being trained in early diagnosis and basic treatment for common mental disorders in children. They are taught to screen patients for signs of developmental disorders by checking, for example, whether a 3-month-old baby's eyes can follow moving objects or whether an 18-month-old child can make eye contact. The problem of the shortage of child psychiatrists has been partially solved.³

Policy support

Children and adolescent mental health problems are related to a country's development and to global changes. About 20% of children and adolescents worldwide experience

mental health disorders. The major challenges for children and adolescents with mental disorders are stigma, isolation, discrimination, and the lack of access to health care and education facilities. Obviously, children and adolescents are vulnerable groups; they have no political power and their mental health problems are complicated. The mental health of children and adolescents requires multisectoral cooperation and the attention of the whole society. In particular, the protection afforded by government actions and policies is crucial. Policies must be designed to ensure that children and adolescents can access even the most basic mental healthcare. However, there are few countries worldwide that provide specific policies for the mental health needs of children and adolescents.⁴

China has a large population of children. Rapid economic development and social reforms in recent years have had a substantial impact on the mental health of children and adolescents. Increasing social pressures and workers migration, and changes in family planning, have changed traditional family structures and social support systems.³ As part of development and progress within China, the Chinese government has initiated a series of policies and regulations to promote mental health. Some of these policies are aimed at promoting mental health in children and adolescents; for example, "The Law of the People's Republic of China on the Protection of Minors", "The Law of the People's Republic of China on the Protection of the Rights and Interests of Women and Children", "The Law of the People's Republic of China on the Protection of Disabled Persons", "Mental Health Law of the People's Republic of China", and programmatic documents such as the "Healthy China 2030 Planning Outline", "National Program of Outline for Action for Child Development in China (2011–2020)", "Guidelines for the Prevention and Treatment of Attention-Deficit/Hyperactivity Disorder", "Guidelines for the Diagnosis, Treatment and Rehabilitation of Children with Autism", and "Technical Specifications for Children's Mental Health Care".^{5–10} These reflect how the support of national policies has driven the development of child psychiatry.

Research that has improved development

Major national basic and clinical research projects have invested in child psychiatry research, such as the National Natural Science Foundation of China, which has supported national research and development plans in key health areas. Research by a team led by Professor Zhang Dai has demonstrated that *FMRI*, *DISC1*, *EN2*, and *SHANK3* genes are related to autism. Studies by a team led by Professor Kun Xia and Jingping Zhao have shown that *XRXN1*, *GRIN2B*, *RELN*, and *DAB1* genes may be antecedents of autism. Such research has been published in several high quality academic journals in recent years.^{11,12} Some research of the National "12th and 13th Five-Year Plan" scientific and technological support projects led by

Professor Yi Zheng, on “The Epidemiological Study of Child Mental Disorders in China” and “Comprehensive Intervention Strategies for Chronic Non-communicable Diseases with Attention Deficit-Hyperactivity Disorder”. These show that Chinese child psychiatry has become a discipline supported by the national key research project.

Traditional research group in child psychiatry include the team led by Professor Guotai Tao, Jie Lin and Xiaoyan Ke about autism, mental retardation and childhood schizophrenia; team led by Professor Yufeng Wang on attention deficit hyperactivity disorder; team led by Professor Xiaoling Yang and Jing Liu about autism spectrum disorders; team led by Professor Xuerong Li, Linyan Su and Xuerong Luo on epidemiological surveys and tool scales for child mental disorders; team led by Professor Rene Xin, Yasong Du and Wenhong Chen on epidemiological investigation of children’s behavior problems and related research on child psychology and family therapy; team led by Professor Shiji Zhang, Yi Zheng, Yonghua Cui and Fan He on tics and related disorders; and team led by Professor Youhe Shan, Lanting Guo and Yi Huang on behavioral scales and tic disorders. The above studies have published valuable articles in academic journals and won many awards.

Clinical practice as foundation

Child psychiatrists need to be dedicated. The treatment of patients with mental illness is difficult and often daunting, and children’s mental health disorders are particularly difficult to treat. Treatment of children with autism or mania requires tackling difficult problems and good practice in basic clinical skills. In China, child psychiatrists experience low returns and low income. The number of child psychiatric inpatients and outpatients is constantly increasing, and their treatment often relies on the dedication of child psychiatrists. To treat such patients, there are now more than 10 centers, nearly 1000 beds, and dozens of special education centers, such as autism rehabilitation centers.

Social responsibility first

To care for left-behind children, children infected with AIDS, children affected by natural disasters such as earthquakes, and children with substance abuse and internet addiction, many child mental health workers and full-time child psychiatrists have formed competent national and local emergency response teams. Child psychiatrists are now available to help children to cope with a variety of social disasters, such as the Wenchuan earthquake or the “3.01” terrorist incident in Kunming.

Communication promotes development

The development of modern child psychiatry in China is interlinked with foreign exchange. Since Professor

Guotai Tao’s studies in the United States in 1940, Chinese child psychiatry has been continuously introducing and incorporating foreign advanced diagnosis and treatment and research concepts. At present, Professor Tao has discussed diagnostic issues with international authoritative experts in foreign journals and participated in the preparation of the 11th revision of the International Classification of Diseases (ICD-11). Professor Tao was the first international participant in efforts to promote the integration of child and adult psychiatry and the popularization of the notion of the lifelong effects of mental illness, such as the Cross-Strait Summit Forum, and domestic and foreign academic institutions and academic exchanges, such as the Asian Society for Child and Adolescent Psychiatry and Allied Professions (ASCAPAP) and the International Association for Child and Adolescent Psychiatry and Allied Professions (IACAPAP). Chinese child psychiatrists have attended and contributed to both of the latter societies.

Development of the discipline

Since the 1930s, older generations of individuals, such as Yulin Cheng, Guotai Tao, and Xueshi Chen, have made substantial contributions to the development of the discipline of child psychiatry. In 1989, Professor Jie Lin set up and led the Child Psychiatric Group of the Chinese Medical Association Psychiatry Branch. Professor Guotai Tao served as a consultant of the Group. Almost at the same time, the Chinese Mental Health Association established the Child and Adolescent Professional Committee, with Xuerong Li as director. Xueshi Chen serves as a consultant. Since then, two academic organizations have held annual meetings or training courses.

In 1998, Professor Shiji Zhang, Yi Zheng, and Linyan Su participated in the IACAPAP congress and joined this organization, which is the most highly regarded academic organization in international child psychiatry. Chinese child psychiatry is fully in line with international developments in child psychiatry. In 2003, Professor Yi Zheng and Linyan Su attended the WHO Expert Headquarters “Concern for Children and Adolescents with Mental Disorders” meeting as Chinese representatives. In the same year, Professor Yi Zheng participated in the ASCAPAP congress and was elected as an executive member. In 2004, Professor Yi Zheng was appointed onto the IACAPAP executive committee. Professor Yi Zheng created the Cross-Strait Children’s Psychiatry Summit Forum, which is held once every 2 years alternately in the mainland of China and Taiwan province, China. The Forum is now in its ninth session and has promoted the rapid development of the discipline.

In 2010, the 19th IACAPAP International congress was successfully held in Beijing. This was the first time that this congress had been held in a developing country.

Professor Yi Zheng served as Executive Chairman, and Professor Jing Liu served as Chairman of the organizing committee. Xiulian Gu, Zhu Chen, Wenkang Zhang and the country's main health care officials attended the opening ceremony and delivered speeches. More than 1300 foreign scholars and 500 domestic scholars attended the congress. Yi Zheng was elected onto the ASCAPAP executive committee and was elected Chairman, and Jing Liu was elected Vice-Chairman of ASCAPAP. At the 21st IACAPAP Conference held in South Africa in 2014, Professor Yi Zheng was elected Vice-President of IACAPAP and won the International Child Psychiatry Outstanding Contribution Award, indicating that Chinese child psychiatry has played a major role on the international stage.²

Professional training

China has a population of more than 1.3 billion individuals, of which 238 million are children younger than 15 years of age.¹³ Though a nationwide prevalence study is lacking, some regional epidemiological studies show that the prevalence of mental health disorders in children is close to the worldwide prevalence of 20%,¹⁴⁻¹⁸ indicating that about 50 million children in China require treatment for mental health disorders. However, there is a scarcity of child and adolescent psychiatrists (CAPs) in China, and there are less than 500 full-time CAPs nationwide. Currently, only a national psychiatrist certification system exists, and there is no child psychiatrist certification system. Instead, students must obtain a postgraduate training certificate or a nationally approved Ph.D. or Master's degree training certificate to become a child psychiatrist. A recent survey showed that training units for CAPs are mainly concentrated in large and medium-sized cities. Moreover, only a small number of medical personnel in China can diagnose and treat children and adolescents with mental health disorders, and these have insufficient training. Currently available training for child psychiatrists contains insufficient scientific, practical, and problem-solving content. Furthermore, current educational training poorly equips child psychiatrists for subsequent teaching and professional scientific research abilities. Therefore, a greater training focus is needed on more comprehensive qualities and abilities, such as dedication. Although CAPs undertake a long process of training, this mainly comprises postgraduate or doctoral Master's degree training; the national specialized certification system for CAPs has only been piloted in major cities. The CAP training system requires further improvements, and more CAPs are needed.¹⁹

China still has a shortage of child psychiatrists. To address this, a new type of multilevel collaboration is currently being implemented. Pediatricians and primary care physicians are also receiving training in child psychiatry. In addition, psychotherapists from other

countries have been recruited to help train psychiatrists. China is currently exploring all possible ways to strengthen multilevel collaboration to promote the children's physical and mental health.³

Promising future

The artificial boundary between children and adults with mental health disorders will be removed: more attention and value will be placed upon the treatment of adult attention deficit-hyperactivity disorder (ADHD), adult autism spectrum disorder (ASD), adult tic disorder, and other issues.

Gene diagnosis and classification of child neurological and mental development disorders will become a reality: the detection of genes for susceptibility to ASD, ADHD, tic disorders, child schizophrenia, and child bipolar disorder will become possible.

The concept of the supremacy of child mental health will gradually be accepted. More and more studies have confirmed that among the main factors for healthy and successful child developmental, child mental health is of paramount importance. As physical health and nutritional issues have been generally resolved in most parts of China, the impact of mental health on the future success of children will be a core health issue. Therefore, mental health should start with children.

The multidisciplinary and multisector nature of child mental health will be further improved: medicine, economics, sociology, and other disciplines will pay close attention to child mental health. In particular, the only-child problem, the problems experienced by elderly parents in raising a second child, the problem of left-behind children, AIDS-infected children, Internet addiction problems, youth suicide, and crime prevention problems will become the focus of social attention.

There will be new breakthroughs in early diagnosis and interventions for child mental health disorders: the ICD-11 (containing input from Chinese experts) will soon be released. Early warning indicators for child psychological problems and quantitative assessment techniques for child mental health care will be promoted from the national level to the whole country. Like child vaccination, assessments and interventions for child psychological conditions will benefit every child, which will set a global precedent.

Treatment methods for child mental health disorders will be qualitatively improved. In addition to the further optimization of the structure and dosage of antipsychotics, research on functional food will make significant progress, and the use of alternative medicine and traditional Chinese medicine for child mental health disorders will be further clarified.

In conclusion, the development of child psychiatry in China is still far behind developed countries, but a golden age of rapid development is approaching.

CONFLICT OF INTEREST

None.

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