

**Chinese perspectives on primary care for common mental disorders:  
Barriers and policy implications**

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## **Abstract**

**Background:** The World Health Organization (WHO) has called for integration of mental health into primary care for a decade. In Western countries, around 15-25% of patients with common mental disorders including mood and anxiety disorders seek help from primary care physicians (PCPs). The rate is only about 5% in China.

**Aims:** This article reviews the Chinese findings on the barriers to primary care for common mental disorders, and how they compared with Western findings.

**Methods:** A narrative literature review was conducted, focusing on literature published from mid-1990s in English or Chinese. Patient, PCP and health system factors were reviewed.

**Results:** Although Chinese and Western findings show similar themes of barriers, the Chinese have stronger barriers in most aspects, including under-recognition of the need for treatment, stigma on mental illness, somatization, worries about taking psychiatric drugs, uncertainties in the role, competency and legitimacy of PCPs in mental health care, and short consultation time.

**Conclusions:** Current policies in China emphasize enhancement of mental health facilities and workforce in the community. Our review suggests that patients' intention to seek help and PCPs' competency in mental health are other fundamental factors to be addressed.

**Keywords:** barriers, Chinese, common mental disorder, help-seeking, primary care, Western

## **Introduction**

The need to increase awareness of mental health problems in primary care settings originated from Western countries in 1960s. One major reason was that some psychiatrists, especially David Goldberg and his colleagues in the UK, recognized the potential advantages of primary care physicians (PCPs) in managing patients with mental health conditions compared with psychiatrists. These included first-hand knowledge of the patients' personal and family background, provision of continuing care, and frequent contacts with patients presenting psychosomatic symptoms (Blackwell & Goldberg, 1968). On the other side of the world, George Engel, an American psychiatrist, suggested a revolutionary biopsychosocial model which challenged the conventional biomedical model in clinical care (Engel, 1977). Moreover, the psychiatrists had developed psychiatric screening questionnaires for primary care settings (D. P. Goldberg & Blackwell, 1970; Johnstone & Goldberg, 1976). They began to investigate the diagnostic accuracy of the PCPs and propose the need for training (D. P. Goldberg, Steele, Smith, & Spivey, 1980). Subsequent studies showed that over half of primary care attenders with mental health problems were not recognized (Freeling, Rao, Paykel, Sireling, & Burton, 1985; A. T. Tylee, Freeling, & Kerry, 1993). These led to further research on mental health care in primary care settings.

The international study conducted by the World Health Organization (WHO) in primary care settings across 15 cities reported that the overall prevalence of current mental disorders was 24%. The most common mental disorders were depression (10.4%) and generalized anxiety disorders (7.9%) (Sartorius, Ustün, & World Health Organization, 1995). In 2008, the WHO called for integration of mental health into primary care (World Health Organization, 2008). Western studies found that only around one third of adult patients with a common mental disorder including mood and anxiety disorders had sought professional help. The 12-month

help-seeking rates reported in the UK, US and Australia were 39%, 29% and 35% respectively (McManus S, 2009; Pratt & Brody, 2008; Slade, Johnston, Oakley Browne, Andrews, & Whiteford, 2009). Various Western studies showed that among patients who had sought help, over half of them consulted PCPs (Kovess-Masfety et al., 2007; McManus S, 2009; Thompson, Hunt, & Issakidis, 2004). Compared with Western findings, the help-seeking rates were lower amongst Chinese. A large-scale study in four provinces of China reported that the 1-month prevalence of mood disorders was 6.1%. The overall help seeking rate and the specific rate for PCPs were 8% and 5% respectively (Phillips et al., 2009).

This narrative literature review paper aims to discuss Chinese findings on the barriers to primary care for common mental disorders, and how they compared with Western findings. An extensive literature search was performed on PubMed and MEDLINE using different combination of the following terms: primary care, general practice/family medicine/family practice, mental health, common mental disorder, depression, anxiety, psychological distress, help-seeking, management, treatment and stigma. The terms Chinese and China were added to specify Chinese studies. Besides, local journals in Chinese were reviewed. Forward and backward searches of reference lists were made to further identify articles. We focus on literature published from mid-1990s because they are more relevant to the current context of mental health care and help-seeking characteristics.

### **Chinese trends in mental health research and policy development**

Most of the help-seeking studies on common mental disorders came from Western countries, despite a few on Chinese immigrants (J. A. Chen, Hung, Parkin, Fava, & Yeung, 2015; Ho, Hunt, & Li, 2008; Kung, 2004; Parker, Chan, Tully, & Eisenbruch, 2005). European countries (especially the UK), the US, Canada and Australia are the major sources of relevant Western

findings. Studies in China tended to focus on psychosis in specialist psychiatric settings (Boey, 1998; Tang, Sevigny, Mao, Jiang, & Cai, 2007; W. Zhang et al., 2013). The review by Liu et al. (2011) highlighted that national mental health service reform had started in China since 2004. In that year, mental health was officially included into the public health program. The Chinese government included both specialist care and primary care services in the mental health reform program which focused on the management of psychosis. Common mental disorders have been called neurotic disorders (Ni et al., 2014). Depression has also been classified as a chronic disease. In 2006, the Chinese Government published guidelines emphasizing community based management of chronic diseases including depression of the elderly patients (S. Chen, Conwell, He, Lu, & Wu, 2015). In 2015, the Government published the 2015-2020 National Mental Health Work Plan which stated the importance of prevention and treatment of depression and anxiety disorders (Xiong & Phillips, 2016).

There have been many local studies on the prevalence and clinical factors of common mental disorders in China, especially on the elderly patients. However, there is a relatively small number of help-seeking and health service studies in primary care settings, which were conducted in major urban cities including Beijing (Juan Chen, 2012; Du et al., 2011), Shanghai (D. F. Wong, Xuesong, Poon, & Lam, 2012; D. F. K. Wong & Li, 2014; Wu et al., 2007; Zhou, Huang, Jin, Guo, & Chen, 2012), Hangzhou (S. Chen, Conwell, et al., 2015), Shenzhen (Deng et al., 2014) and Hong Kong (Chin, Chan, Lam, Lam, & Wan, 2015; Chin et al., 2014; Lam, Lam, Lam, & Ku, 2013; Lam & Sun, 2014; Sun, Lam, Lam, & Lo, 2015b; Sun et al., 2016). The findings from these major cities as well as other cities are highlighted in this paper. Some studies on Chinese immigrants in Western countries are also included.

Regarding terminology, the term “mental health problem” is commonly used by medical

professionals. In primary care studies, it mainly refers to common mental disorders (D. Rickwood, Thomas, & Bradford, 2012). On the other hand, the term “psychological problem/distress” is often used in patient studies. These terms are used in this paper to preserve the original contexts of the studies on PCPs or patients. The barriers to mental health care including patient, PCP and health system factors are discussed below. For comparison purpose, under each theme, we describe the international or Western findings first, followed by specific Chinese studies.

## **Patient factors**

### *Under-recognition of the need for treatment*

A systematic review on international data (Prins, Verhaak, Bensing, & van der Meer, 2008) concluded that between 49% and 84% of the patients with depression or anxiety perceived a need for treatment. The latest WHO World Mental Health Survey found that on average 57% respondents with major depressive disorders in 21 countries recognized the need of treatment. The rate was only 39% in Beijing/Shanghai, China (Thornicroft et al., 2017). Inadequate mental health literacy is one factor for under-recognition of the need for treatment. A comparative study found that the Shanghai Chinese had lower mental health literacy than the Chinese in Australia and Hong Kong (D. F. Wong, et al., 2012). Another important factor is the preference for self-coping to professional treatment. When self-coping did not work, the distressed would then consider professional help (Doblyte & Jimenez-Mejias, 2017). Un-guided self-coping strategies could be ineffective, delay treatment or even counterproductive. Reported in both Western and Chinese studies, patients used various coping strategies, such as avoidance, withdrawal, minimizing the problem, suppressing the symptoms, wishing the condition to go away, and resignation to fate (Del Valle, Belloch, & Carrio, 2017; Kung, 2004). Some of these strategies might be in opposite to the approaches used in cognitive behavioral therapy (CBT),

which emphasizes correcting biased thoughts based on evidence, exposure to situations and symptoms, and behavioral changes in a structured approach (Arch & Craske, 2009). A study in Jiangyin analyzed the initial help-seeking behaviors of distressed patients attending a community psychology clinic. It revealed that 8% of patients had self medicated for their distress by buying drugs/health care products over-the-counter, or having self (mental) training, and 6% used lay religious practice (Shen, Qian, Du, & Feng, 2006). A study in Hong Kong found that 13% of the primary care patients with distress experience used informal sources of help only, such as family members/friends, exercise and religious support. Besides, 52% had not sought any formal or informal help (Sun et al., 2017).

### ***Stigma on mental illness***

Around 15 - 30% of patients in Western studies regarded stigma or embarrassment as a barrier to seeking professional help (Bushnell et al., 2005; Meltzer et al., 2003). To avoid social stigma, patients often preferred self-coping strategies (Doblyte & Jimenez-Mejias, 2017; Debra Rickwood, Deane, Wilson, & Ciarrochi, 2005). Higher stigmatizing attitudes were associated with lower rates of help-seeking (Evans-Lacko, Brohan, Mojtabai, & Thornicroft, 2012). The degree of stigma was affected by cultural factors. Comparative studies showed that Chinese had higher stigma towards mental illnesses than the Westerners (Furnham & Chan, 2004; Yang et al., 2007). The stigma might be increased by the serious concern about shame and loss of “face” in Chinese culture, which could also be projected to the patients’ family (Kung, 2004). Yang et al. (2013) argues that stereotypes of dangerousness and unpredictability towards mental health patients challenge Chinese cultural norms of restrained and moderate behavior. However, different from psychotic disorders, depression and anxiety disorders are often seen by the Chinese as common problems encountered in life (Kolstad & Gjesvik, 2014; Lam & Sun, 2014). The viewpoints from Kung (2004) may be more relevant to conditions of common mental

disorders. She points out that Chinese see the causes as having bad thoughts and personality weakness. Besides, psychological treatments require examination of thoughts and feelings associated with distress, which Chinese tend to avoid.

### ***Psychosomatic presentations***

It is well known that many patients present with psychosomatic symptoms only (Cape & McCulloch, 1999; A. Tylee, Freeling, Kerry, & Burns, 1995), such as headache, dizziness, fatigue/weakness, palpitations and sleep problems (Matalon, Kotliroff, Blumberg, Yaphe, & Kitai, 2011). Patients may not link their symptoms to psychological causes (Murray, Toussaint, Althaus, & Lowe, 2016). Besides, somatization is considered as a way for some patients to avoid expression of mental health problems which are subject to social stigma (Murray, et al., 2016; Simon, VonKorff, Piccinelli, Fullerton, & Ormel, 1999). Some patients may be treated as having functional, non-specific, or medically unexplained symptoms without a formal diagnosis of mental disorder (Matalon, et al., 2011). Unnecessary somatic treatments may be prescribed (Walters, Tylee, Fisher, & Goldberg, 2007). An international study conducted in 14 countries found that 45% to 95% (overall 69%) of depressed patients presented only somatic symptoms to their PCP. A high somatization rate of 87% was reported in Shanghai, China (Simon, et al., 1999). Parker, Gladstone, and Chee (2001) argue that Chinese often express depression in somatic terms like “heartache” (means sadness) and “fatigue” (means emotionally hurt or despair). The Chinese might understand the emotional meanings of these terms. However, research studies found that the issue was not just about usage of terms. In Hong Kong, the PCPs reported that many patients did not realize the psychological causes of their somatic symptoms, especially at the early stage of consultations (Sun, Lam, Lam, & Lo, 2015a; Sun, et al., 2015b). The study in Jiangyin found that 35% of the patients of a community psychology clinic had initially consulted specialists in neurology, cardiology, gastroenterology,

pulmonology and emergency medicine, and 10% had initially consulted PCPs (Shen, et al., 2006). A study in Shanghai found that the top ten reasons for distressed patients to consult PCPs were: weakness (9.4%), sleep disorder (9.0%), abdominal pain (5.6%), chest distress (4.7%), dizziness (4.3%), chest pain (3.8%), headache (3.4%), anxiety (3.0%), depression (3.0%) and cough (2.6%) (Zhou, Huang, Jin, et al., 2012).

### ***Patients' uncertainties in the role of PCPs in mental health care***

Related to somatic presentations, Western studies found that many patients believed PCPs dealt with physical illnesses only and suspected their ability in managing psychological problems (Bushnell, et al., 2005; Murray, et al., 2016; Peters et al., 2009). Some patients also felt their PCPs were not interested in discussing psychological problems (Cape & McCulloch, 1999). Patients might simplify their problems and focus on their somatic complaint (Peters, et al., 2009). In an Australian survey, 34% of the patients perceived that PCPs were not the right persons to be consulted for psychological problems (Bushnell, et al., 2005). A much higher rate was reported in Hong Kong that 64% of the Chinese patients did not expect PCPs to manage psychological problems (Sun, et al., 2016).

### ***Worries about taking psychiatric drugs***

Antidepressants are the most commonly prescribed medications for depression and anxiety disorders (Bandelow et al., 2015; Coupland et al., 2011). Benzodiazepines are sometimes prescribed to patients for temporary relief of symptoms (Sjostedt, Ohlsson, Li, & Sundquist, 2017). Systematic review and meta-analysis studies concluded that patients usually preferred psychotherapy to medication (76% vs. 49%) (Angermeyer, van der Auwera, Carta, & Schomerus, 2017; Prins, et al., 2008). Both general public and diagnosed patients expressed in qualitative studies that drugs relieved the distress symptoms rather than solving the problem,

and they might become addicted to the drugs (Kadam, Croft, McLeod, & Hutchinson, 2001; Priest, Vize, Roberts, Roberts, & Tylee, 1996). Besides, some patients assumed that PCPs were unable to give “talking” therapy. They thought antidepressant prescription was the most likely outcome which they wanted to avoid (Biddle, Donovan, Gunnell, & Sharp, 2006). A comparative study found that the Chinese schizophrenic patients had lower acceptance towards psychiatric medications than the American patients (Mohamed, Rosenheck, He, & Yuping, 2014). The worries about medications generalize to conditions of common mental disorders. The study in Hong Kong found that worries about side effects of psychiatric drugs (80%) and drug dependency (75%) were rated as the top barriers by the Chinese primary care attenders (Sun, et al., 2016).

## **PCP factors**

### ***Difficulty in recognizing and handling patients with somatic presentations***

Western studies showed that PCPs’ recognition of mental health problems was significantly lower among somatic presenters (Bridges & Goldberg, 1985; Hickie et al., 2001; Weich, Lewis, Donmall, & Mann, 1995). Somatic presentations increase diagnostic difficulty as they are often incomplete, implicit and without psychosocial cues provided (Murray, et al., 2016). Another problem is that patients may feel intrusive to be asked about psychosocial issues if they do not realize the relation with their physical problems (Peters, et al., 2009). A qualitative study found that some patients with unexplained somatic complaints felt dissatisfied when the PCP concluded that they had depression (Gask, Rogers, Oliver, May, & Roland, 2003). The difficulty appears to be stronger in a Chinese context. In Hong Kong, the PCPs highlighted in qualitative interviews about patients’ expectation for an explanation in physical terms and patients’ reluctance to discuss psychological problems. In the survey, 72% of the PCPs perceived the difficulty in managing their patients’ reluctance to accept the diagnosis of mental

health problems (Sun, et al., 2015b). Similarly, a study in Shanghai found that two-thirds of the PCPs perceived patients' reluctance to accept the diagnosis of depression. Besides, over half of them thought that they should treat physical problems ahead of depression (Wu, et al., 2007).

### ***Competency in mental health care***

Mitchell, Vaze, and Rao (2009) conducted a meta-analysis of studies which assessed the accuracy of diagnoses of depression by PCPs. This study found that only 47.3% of depression cases were correctly identified. An Australian survey found that PCPs without mental health training were more likely to perceive incomplete knowledge about depression as a management barrier (Richards, Ryan, McCabe, Groom, & Hickie, 2004). Indeed, many PCPs had little or no formal mental health training in medical schools (Lam et al., 2011). Even in the UK, less than half of PCPs have received mental health training (England, Nash, & Hawthorne, 2017). PCPs were also found to be less confident about using psychotherapy than medication for the treatment (Oakley Browne, Lee, & Prabhu, 2007). A study in Ireland reported that only one third of PCPs had received postgraduate training in psychotherapy (Coptly & Whitford, 2005). The overall percentage of trained PCPs is unknown in China where training programs tended to be on management of psychosis (Liu, et al., 2011). A study in Hangzhou reported that 17% of the PCPs had received short period of mental health training (S.-l. Chen et al., 2010). A study in Shanghai found that 71% of the PCPs without mental health training answered wrongly for all five questions about geriatric depression, compared to 30% of those with a specific training intervention (Wu, et al., 2007). A study in Beijing found that only 18%, 13% and 30% of the PCPs correctly selected the symptoms, screening methods and therapeutic principles of depression respectively. Only 30-40% of the PCPs recognized the followings as common symptoms of depression: loss in appetite or significant weight loss (31%), psychomotor agitation or retardation (38%), poor concentration (38%), and fatigue or loss of energy (39%)

(Du, et al., 2011). Another Beijing study found that 70% of elderly patients with delayed treatment for depression in psychiatric hospitals reported inability of PCPs to identify depression as the reason, which ranked second among all reasons (Lyu, Li, Han, Cheng, & An, 2015).

### ***Attitudes towards mental health care***

Some PCPs have limited interest and motivation to manage mental health problems (Garcia-Campayo, Sanz-Carrillo, Yoldi-Elcid, Lopez-Aylon, & Monton, 1998; Oopik, Aluoja, Kalda, & Maaros, 2006). Mental health care may be seen as only one of a number of priorities (McDermott et al., 2012). There have been debates between psychiatrists and PCPs about the definitions of cases with depression or anxiety (caseness) in primary care settings (Earnshaw, 2000; D. Goldberg, 2000; Middleton & Shaw, 2000). In practice, PCPs may not treat cases which they consider as being “subthreshold” or mild conditions. Many do not stick to the diagnostic criteria used by psychiatrists and researchers (McDermott, et al., 2012; Mental & General Practice Investigation Research, 2004). Apart from a lack of proactive attitude in management, some PCPs may hold negative views towards mental health patients. Western studies showed that, similar to the general public, some health professionals including PCPs held stigmatizing opinions on mental health patients (Caldwell & Jorm, 2001; Lawrie et al., 1998; Reavley, Mackinnon, Morgan, & Jorm, 2014). Despite this, they had better attitudes towards non-psychotic disorders. In Hong Kong, 72% of the PCP survey respondents expressed their willingness to manage depression, compared to 40% for schizophrenia. (Lam, et al., 2013). Nonetheless, lacking of skills could lower the willingness. The Hangzhou study found that most PCPs were uncomfortable in managing depression and they preferred psychiatrists/psychologists to handle it (S.-l. Chen, et al., 2010). The Shanghai study found that 59% of the PCPs without mental health training would refer depression cases to psychiatrists,

compared to 32% of those with training (Wu, et al., 2007).

## **Health system factors**

### ***Law and policies***

Western countries generally allow PCPs to diagnose common mental disorders. The situation is the same in Hong Kong. However, under the mental health law for Mainland China issued in 2013, only physicians with psychiatric qualifications can diagnose mental disorders (Y. Li et al., 2015; Phillips et al., 2013). Thus most PCPs can only recognize patients with potential mental health problems and refer them to psychiatrists for a formal diagnosis. Afterwards the PCPs may follow-up and manage the diagnosed patients. Under this policy, the legitimacy of most PCPs in mental health care depends on the psychiatrists.

### ***Accessibility and affordability of services***

The WHO Mental Health Survey found that the treatment rate showed a downward gradient across high to low income countries (Thornicroft, et al., 2017). Unequal access to mental health services was also observed within countries. Australians living in areas of lower socioeconomic status were found to have poorer access to mental health care sources including PCPs (Meadows, Enticott, Inder, Russell, & Gurr, 2015). Similarly, the study by Juan Chen (2012) in Beijing reported that patients with lower socioeconomic status were less likely to utilize mental health services. However, the barriers regarding accessibility (22%) and affordability (27%) of services were considered less important by the patients. Instead, refusal to recognize the need of treatment (66%) was the major barrier (Juan Chen, 2012). In most cities of China, costs of antidepressants including selective serotonin reuptake inhibitors (SSRIs) have been partially covered by national health insurance (Tao, Wang, & Cui, 2015). The reimbursement rate varies by region (Liang, Mays, & Hwang, 2017), and the national reimbursement rate for

all types of medical expenditure (including physical and mental) was 26.4% in 2011 (Y. Zhang, Tang, Zhang, Zhang, & Zhang, 2015). On the other hand, Hong Kong, being a special administrative region, runs a different system where 71% of the primary care attenders perceived treatment cost of psychological distress as a barrier (Sun, et al., 2016). The fee charged by private PCPs in Hong Kong can be tripled for consultations specially arranged for treating mental health problems to compensate for the extra time cost.

### ***Consultation time constraints***

A review study by Hutton and Gunn (2007) showed that consultations with a recorded diagnosis of mental health problem were longer than other consultations. Some PCPs expressed that short consultation time limited their chance to care for mental health problems. Treating these problems might lengthen the consultations and lead to increased waiting time of other patients. PCPs working in private sector might need to subsidize these longer consultations if there is no extra charge (MaGPIe Research Group, 2005). There are opinions that fee-for-service systems tend to favor short consultations and procedural practice rather than long mental health consultations (McDermott, et al., 2012). In Hong Kong, consultation time constraints was perceived by 85% of PCP survey respondents as a barrier to mental health care (Sun, et al., 2015b). This is due to the fact that the usual consultation time in primary care clinics of Hong Kong is only around 5-8 minutes (Yu et al., 2015), compared to an average of 9.4 minutes reported in the UK, 10.2 minutes in the Netherlands, 14.6 minutes in Australia, and 17.5 minutes in the US (Hutton & Gunn, 2007). Studies in Beijing also reported a short average consultation time in general practice, ranging from 3 to 8 minutes (Jin et al., 2015; Peng, Su, & He, 2012). Time constraints (50%) ranked middle among different barriers to mental health care perceived by PCPs in Beijing. Other barriers regarding limited knowledge in diagnosis/management (84%) and consultations dominated by physical complaints (62%)

ranked higher (Du, et al., 2011).

## **Implications to mental health care in urban China**

Western and Chinese findings show similarity in the barriers encountered by the patients and PCPs. However, the Chinese have stronger barriers in most aspects, including under-recognition of the need for treatment, stigma on mental illness, somatization, worries about taking psychiatric drugs, uncertainties in the role, competency and legitimacy of PCPs in mental health care, and short consultation time. In this section, we discuss the possible strategies and interventions to overcome the barriers. As China has a huge population of 1.4 billion, a 6.1% prevalence of mood disorder (Phillips, et al., 2009) means 85 million patients. Despite low help seeking rates, depression and anxiety disorders/state still ranked 5<sup>th</sup> (3.4%) and 7<sup>th</sup> (3.0%) respectively among all diagnoses in a general practice study of Shanghai (Zhou, Huang, Chen, Guo, & Jin, 2012). Our discussion focuses on policy implications to major urban cities of China, which take a piloting and leading role in mental health reform (Ji et al., 2008).

### ***Patient factors***

While policies in China emphasize enhancement of mental health services in hospital and primary care settings (Liang, et al., 2017), one fundamental problem is the patients' low intention to seek help, which should be the first barrier to be tackled. Public education to promote mental health literacy may reduce under-recognition of the need for treatment and stigma on mental illness (Yap, Reavley, & Jorm, 2012). In a Chinese context, public education programs should target worries about taking psychiatric drugs (Sun, et al., 2016) apart from mental health literacy (D. F. Wong, et al., 2012). A significant proportion of the public would still prefer self-coping to professional treatment for mild to moderate distress. Proper self-coping skills may be delivered by websites using evidence-based materials developed by

mental health professionals (Andrews, Cuijpers, Craske, McEvoy, & Titov, 2010; Rosso et al., 2017). Apart from providing self-help materials, the websites can also be the connection points to access professional services from PCPs and mental health professionals. The Beyondblue and Headspace websites in Australia are well established examples. A recent survey in Beijing found that nearly 20% of residents had searched for mental health information online. Younger age and higher socioeconomic status were significant predictors (J. Chen & Zhu, 2016). For the majority of patients who have less health literacy, the formal health care system remains the entry point to mental health care. Public education should enhance the image of PCPs as a source of mental health care and referral (Sun, et al., 2016).

### ***PCP and health system factors***

Lack of workforce for mental health care is commonly acknowledged as a barrier in China (K. Li, Sun, Zhang, & Kolstad, 2014; Liang, et al., 2017) although there is limited data available for comparison with Western figures. We see the competency of PCPs in mental health care is another critical factor as shown in this review. Indeed, the workforce for mental health care would multiply if a significant proportion of PCPs possess the skills, which can be enhanced by training (Walters, et al., 2007). Successful experiences have been reported in Hong Kong (Lam, et al., 2011), Shanghai (Wu, et al., 2007), Hangzhou (C. Chen et al., 2004) and Shanxi (Jia & Wang, 2015). Training programs should target recognition and management of common mental disorders, especially for the skills in handling psychosomatic complaints, which are the top reasons for consultation (Zhou, Huang, Jin, et al., 2012). Besides, trainings can improve motivation in providing mental health care in daily practice as well as attitudes towards mental health patients (Lam, et al., 2011; Lam, Lam, Lam, & Sun, 2015). Moreover, trainings can justify the legitimacy of PCPs in mental health care in Mainland China. Relevant trainings can be provided by psychiatrists, psychologists and experienced PCPs. To deal with consultation

time constraints, the PCPs can arrange follow-up consultations to focus on the patients' mental health problems and this will also allow the patients be better prepared for discussing their problems (Sun, et al., 2015a). Further, collaboration with other health professionals such as clinical psychologists, social workers, nurses and occupational therapists can provide longer sessions of counselling and psychosocial support to the distressed patients. A cluster-randomized trial in 16 primary care clinics of Hangzhou city showed positive outcomes of collaborative care to elderly patients with depression (S. Chen, Conwell, et al., 2015). The program involved trained PCPs, primary care nurses as care managers, and psychiatrists for expertise support. Service coverage among the population is likely to be limited at the beginning stage. A recent survey in Guangdong still reported a shortage of mental health workforce, of which only 28% were for community settings (Y. Li, et al., 2015). Despite this, we believe service development can build on successful experiences and the coverage can expand gradually to a larger proportion of the population of China. The number of PCPs trained in mental health care as well as other mental health staff would increase significantly when relevant national policies are implemented. Manpower and skills should complement each other to maximize the effect.

## References

- Andrews, G., Cuijpers, P., Craske, M. G., McEvoy, P., & Titov, N. (2010). Computer therapy for the anxiety and depressive disorders is effective, acceptable and practical health care: a meta-analysis. *PLoS One*, 5(10), e13196.
- Angermeyer, M. C., van der Auwera, S., Carta, M. G., & Schomerus, G. (2017). Public attitudes towards psychiatry and psychiatric treatment at the beginning of the 21st century: a systematic review and meta-analysis of population surveys. *World Psychiatry*, 16(1), 50-61.
- Arch, J. J., & Craske, M. G. (2009). First-line treatment: a critical appraisal of cognitive behavioral therapy developments and alternatives. *Psychiatr Clin North Am*, 32(3), 525-547.
- Bandelow, B., Reitt, M., Rover, C., Michaelis, S., Gorlich, Y., & Wedekind, D. (2015). Efficacy of treatments for anxiety disorders: a meta-analysis. *Int Clin Psychopharmacol*, 30(4), 183-192.
- Biddle, L., Donovan, J. L., Gunnell, D., & Sharp, D. (2006). Young adults' perceptions of GPs as a help source for mental distress: a qualitative study. *Br J Gen Pract*, 56(533), 924-931.
- Blackwell, B., & Goldberg, D. P. (1968). Psychiatric interviews in general practice. *Br Med J*, 4(5623), 99-101.
- Boey, K. W. (1998). Help-seeking pattern of psychiatric outpatients in urban China. *Int J Psychiatr Nurs Res*, 4(1), 433-443.
- Bridges, K. W., & Goldberg, D. P. (1985). Somatic presentation of DSM III psychiatric disorders in primary care. *J Psychosom Res*, 29(6), 563-569.
- Bushnell, J., McLeod, D., Dowell, A., Salmond, C., Ramage, S., Collings, S., et al. (2005). Do patients want to disclose psychological problems to GPs? *Fam Pract*, 22(6), 631-637.
- Caldwell, T. M., & Jorm, A. F. (2001). Mental health nurses' beliefs about likely outcomes for people with schizophrenia or depression: a comparison with the public and other healthcare professionals. *The Australian and New Zealand journal of mental health nursing*, 10(1), 42-54.
- Cape, J., & McCulloch, Y. (1999). Patients' reasons for not presenting emotional problems in general practice consultations. *Br J Gen Pract*, 49(448), 875-879.
- Chen, C., Ren, J., Shi, X., Zhang, T., Huang, J., & Ren, Y. (2004). The effect of the training of general practitioner psychology medicine on family medicine practice [in Chinese]. *Chinese General Practice*, 7(13), 950-951.
- Chen, J. (2012). Seeking help for psychological distress in urban China. *Journal of Community Psychology*, 40(3), 319-341.
- Chen, J., & Zhu, S. (2016). Online Information Searches and Help Seeking for Mental Health Problems in Urban China. *Adm Policy Ment Health*, 43(4), 535-545.

- Chen, J. A., Hung, G. C., Parkin, S., Fava, M., & Yeung, A. S. (2015). Illness beliefs of Chinese American immigrants with major depressive disorder in a primary care setting. *Asian J Psychiatr*, *13*, 16-22.
- Chen, S.-l., Xu, B.-h., Cheng, Y., Ma, y., Jin, T., & Wu, M.-h. (2010). General physicians' attitude and clinical practice toward depression patients in primary care [in Chinese]. *Chinese Journal of Public Health*, *26*(1), 114-115.
- Chen, S., Conwell, Y., He, J., Lu, N., & Wu, J. (2015). Depression care management for adults older than 60 years in primary care clinics in urban China: a cluster-randomised trial. *Lancet Psychiatry*, *2*(4), 332-339.
- Chin, W. Y., Chan, K. T., Lam, C. L., Lam, T. P., & Wan, E. Y. (2015). Help-seeking intentions and subsequent 12-month mental health service use in Chinese primary care patients with depressive symptoms. *BMJ Open*, *5*(1), e006730.
- Chin, W. Y., Chan, K. T., Lam, C. L., Wong, S. Y., Fong, D. Y., Lo, Y. Y., et al. (2014). Detection and management of depression in adult primary care patients in Hong Kong: a cross-sectional survey conducted by a primary care practice-based research network. *BMC Fam Pract*, *15*, 30.
- Coptly, M., & Whitford, D. L. (2005). Mental health in general practice: assessment of current state and future needs. *Irish Journal of Psychological Medicine*, *22*(03), 83-86.
- Coupland, C., Dhiman, P., Morriss, R., Arthur, A., Barton, G., & Hippisley-Cox, J. (2011). Antidepressant use and risk of adverse outcomes in older people: population based cohort study. *BMJ*, *343*, d4551.
- Del Valle, G., Belloch, A., & Carrio, C. (2017). The long and complex road in the search for treatment for mental disorders: An analysis of the process in five groups of patients. *Psychiatry Res*, *253*, 1-8.
- Deng, X. L., Zhang, J., Su, H. Y., Zhang, Q. S., Tang, J. J., & Hou, Y. H. (2014). Mental health knowledge of community general practitioners in Bao'an District of Shenzhen [in Chinese]. *Practical Preventive Medicine*(6), 750-752.
- Doblyte, S., & Jimenez-Mejias, E. (2017). Understanding Help-Seeking Behavior in Depression: A Qualitative Synthesis of Patients' Experiences. *Qual Health Res*, *27*(1), 100-113.
- Du, L., Ge, C.-y., Zhao, Y.-l., Zhang, S., Cui, S.-q., & Lu, X. (2011). Demand of general practitioner in Beijing for training on depression and the strategy. *Chinese General Practice*, *14*(1), 6-9.
- Earnshaw, G. (2000). Distinguishing mental illness in primary care. Nature of psychological illness in primary care needs to be defined. *BMJ*, *321*(7273), 1412; author reply 1413.
- Engel, G. L. (1977). The need for a new medical model: a challenge for biomedicine. *Science*, *196*(4286), 129-136.
- England, E., Nash, V., & Hawthorne, K. (2017). GP training in mental health needs urgent

- reform. *BMJ*, 356, j1311.
- Evans-Lacko, S., Brohan, E., Mojtabai, R., & Thornicroft, G. (2012). Association between public views of mental illness and self-stigma among individuals with mental illness in 14 European countries. *Psychol Med*, 42(8), 1741-1752.
- Freeling, P., Rao, B. M., Paykel, E. S., Sireling, L. I., & Burton, R. H. (1985). Unrecognised depression in general practice. *Br Med J (Clin Res Ed)*, 290(6485), 1880-1883.
- Furnham, A., & Chan, E. (2004). Lay theories of schizophrenia. A cross-cultural comparison of British and Hong Kong Chinese attitudes, attributions and beliefs. *Soc Psychiatry Psychiatr Epidemiol*, 39(7), 543-552.
- Garcia-Campayo, J., Sanz-Carrillo, C., Yoldi-Elcid, A., Lopez-Aylon, R., & Monton, C. (1998). Management of somatisers in primary care: are family doctors motivated? *Aust N Z J Psychiatry*, 32(4), 528-533.
- Gask, L., Rogers, A., Oliver, D., May, C., & Roland, M. (2003). Qualitative study of patients' perceptions of the quality of care for depression in general practice. *Br J Gen Pract*, 53(489), 278-283.
- Goldberg, D. (2000). Distinguishing mental illness in primary care. Mental illness or mental distress? *BMJ*, 321(7273), 1412; author reply 1413.
- Goldberg, D. P., & Blackwell, B. (1970). Psychiatric illness in general practice. A detailed study using a new method of case identification. *Br Med J*, 1(5707), 439-443.
- Goldberg, D. P., Steele, J. J., Smith, C., & Spivey, L. (1980). Training family doctors to recognise psychiatric illness with increased accuracy. *Lancet*, 2(8193), 521-523.
- Hickie, I. B., Davenport, T. A., Scott, E. M., Hadzi-Pavlovic, D., Naismith, S. L., & Koschera, A. (2001). Unmet need for recognition of common mental disorders in Australian general practice. *Med J Aust*, 175 Suppl, S18-24.
- Ho, K. P., Hunt, C., & Li, S. (2008). Patterns of help-seeking behavior for anxiety disorders among the Chinese speaking Australian community. *Soc Psychiatry Psychiatr Epidemiol*, 43(11), 872-877.
- Hutton, C., & Gunn, J. (2007). Do longer consultations improve the management of psychological problems in general practice? A systematic literature review. *BMC Health Serv Res*, 7, 71.
- Ji, W. D., Chang, H. F., Fang, W. L., Gu, M. Z., Gao, Y. Q., Zheng, H., et al. (2008). Views on implementation of community mental health system with Chinese characteristics [in Chinese]. *Journal of Clinical Psychosomatic Diseases*, 14(6), 543-545.
- Jia, L., & Wang, Z. (2015). The analysis of the intervention diagnosis effect on detection rate for mental disorder at general outpatient in community health service center [in Chinese]. *Journal of Shanxi Medical College For Continuing Education*, 25(5), 5-8.
- Jin, G., Zhao, Y., Chen, C., Wang, W., Du, J., & Lu, X. (2015). The length and content of general practice consultation in two urban districts of Beijing: a preliminary observation

- study. *PLoS One*, *10*(8), e0135121.
- Johnstone, A., & Goldberg, D. (1976). Psychiatric screening in general practice. A controlled trial. *Lancet*, *1*(7960), 605-608.
- Kadam, U. T., Croft, P., McLeod, J., & Hutchinson, M. (2001). A qualitative study of patients' views on anxiety and depression. *Br J Gen Pract*, *51*(466), 375-380.
- Kolstad, A., & Gjesvik, N. (2014). Collectivism, individualism, and pragmatism in China: implications for perceptions of mental health. *Transcult Psychiatry*, *51*(2), 264-285.
- Kovess-Masfety, V., Saragoussi, D., Sevilla-Dedieu, C., Gilbert, F., Suchocka, A., Arveiller, N., et al. (2007). What makes people decide who to turn to when faced with a mental health problem? Results from a French survey. *BMC Public Health*, *7*, 188.
- Kung, W. W. (2004). Cultural and practical barriers to seeking mental health treatment for Chinese Americans. *Journal of Community Psychology*, *32*(1), 27-43.
- Lam, T. P., Goldberg, D., Tse, E. Y., Lam, K. F., Mak, K. Y., & Lam, E. W. (2011). What do primary care doctors get out of a year-long postgraduate course in community psychological medicine? *Int J Psychiatry Med*, *42*(2), 133-149.
- Lam, T. P., Lam, K. F., Lam, E. W., & Ku, Y. S. (2013). Attitudes of primary care physicians towards patients with mental illness in Hong Kong. *Asia Pac Psychiatry*, *5*(1), E19-28.
- Lam, T. P., Lam, K. F., Lam, E. W., & Sun, K. S. (2015). Does Postgraduate Training in Community Mental Health Make a Difference to Primary Care Physicians' Attitudes to Depression and Schizophrenia? *Community Ment Health J*, *51*(6), 641-646.
- Lam, T. P., & Sun, K. S. (2014). Stigmatizing opinions of chinese toward different types of mental illnesses: a qualitative study in Hong Kong. *Int J Psychiatry Med*, *48*(3), 217-228.
- Lawrie, S. M., Martin, K., McNeill, G., Drife, J., Chrystie, P., Reid, A., et al. (1998). General practitioners' attitudes to psychiatric and medical illness. *Psychol Med*, *28*(6), 1463-1467.
- Li, K., Sun, X., Zhang, Y., & Kolstad, A. (2014). Mental health care in China: review on the delivery and policy issues in 1949-2009 and the outlook for the next decade. *Acta Neuropsychiatr*, *26*(3), 134-145.
- Li, Y., Jia, F., Hou, C., Ryan, B., Blashki, G., Everall, I., et al. (2015). A survey of the mental health workforce in Guangdong: implications for policy and workforce planning. *Australas Psychiatry*, *23*(6), 675-678.
- Liang, D., Mays, V. M., & Hwang, W. C. (2017). Integrated mental health services in China: challenges and planning for the future. *Health Policy Plan*.
- Liu, J., Ma, H., He, Y. L., Xie, B., Xu, Y. F., Tang, H. Y., et al. (2011). Mental health system in China: history, recent service reform and future challenges. *World Psychiatry*, *10*(3), 210-216.
- Lyu, Y., Li, Z., Han, M., Cheng, G., & An, F. (2015). Reasons for delay in seeking for mental

- health care among Chinese elderly people with depressive disorder [in Chinese]. *Chinese Nursing Management*, 15(4), 433-436.
- MaGPIe Research Group. (2005). General practitioners' perceptions of barriers to their provision of mental healthcare: a report on Mental Health and General Practice Investigation (MaGPIe). *N Z Med J*, 118(1222), U1654.
- Matalon, A., Kotliroff, A., Blumberg, G., Yaphe, J., & Kitai, E. (2011). Non-specific symptoms as clues to changes in emotional well-being. *BMC Fam Pract*, 12, 77.
- McDermott, F., Huppert, D., Blashki, G., Stone, L., Epstein, M., Olsen, A., et al. (2012). The active participants in mental health services. In G. Meadows, J. Farhall, E. Fossey, M. Grigg, F. McDermott & B. Singh (Eds.), *Mental Health in Australia: Collaborative Community Practice* (3rd ed.). South Melbourne: Oxford University Press.
- McManus S, M. H., Brugha T, Bebbington P, Jenkins R. (2009). *Adult psychiatric morbidity in England, 2007: results of a household survey*. . England: The NHS Information Centre.
- Meadows, G. N., Enticott, J. C., Inder, B., Russell, G. M., & Gurr, R. (2015). Better access to mental health care and the failure of the Medicare principle of universality. *Med J Aust*, 202(4), 190-194.
- Meltzer, H., Bebbington, P., Brugha, T., Farrell, M., Jenkins, R., & Lewis, G. (2003). The reluctance to seek treatment for neurotic disorders. *Int Rev Psychiatry*, 15(1-2), 123-128.
- Mental, H., & General Practice Investigation Research, G. (2004). General practitioner recognition of mental illness in the absence of a 'gold standard'. *Aust N Z J Psychiatry*, 38(10), 789-794.
- Middleton, H., & Shaw, I. (2000). Distinguishing mental illness in primary care. We need to separate proper syndromes from generalised distress. *BMJ*, 320(7247), 1420-1421.
- Mitchell, A. J., Vaze, A., & Rao, S. (2009). Clinical diagnosis of depression in primary care: a meta-analysis. *Lancet*, 374(9690), 609-619.
- Mohamed, S., Rosenheck, R., He, H., & Yuping, N. (2014). Insight and attitudes towards medication among inpatients with chronic schizophrenia in the US and China. *Soc Psychiatry Psychiatr Epidemiol*, 49(7), 1063-1070.
- Murray, A. M., Toussaint, A., Althaus, A., & Lowe, B. (2016). The challenge of diagnosing non-specific, functional, and somatoform disorders: A systematic review of barriers to diagnosis in primary care. *J Psychosom Res*, 80, 1-10.
- Ni, C., Ma, L., Wang, B., Yan, Y., Huang, Y., Wallen, G. R., et al. (2014). Neurotic disorders of general medical outpatients in Xi'an, China: knowledge, attitudes, and help-seeking preferences. *Psychiatr Serv*, 65(8), 1047-1053.
- Oakley Browne, M., Lee, A., & Prabhu, R. (2007). Self-reported confidence and skills of general practitioners in management of mental health disorders. *Aust J Rural Health*, 15(5), 321-326.

- Oopik, P., Aluoja, A., Kalda, R., & Maaroos, H. I. (2006). Family doctors' problems and motivating factors in management of depression. *BMC Fam Pract*, 7, 64.
- Parker, G., Chan, B., Tully, L., & Eisenbruch, M. (2005). Depression in the Chinese: the impact of acculturation. *Psychol Med*, 35(10), 1475-1483.
- Parker, G., Gladstone, G., & Chee, K. T. (2001). Depression in the planet's largest ethnic group: the Chinese. *Am J Psychiatry*, 158(6), 857-864.
- Peng, Y. C., Su, N., & He, Y. J. (2012). Work content of key posts in community health services: a non-participant observation[in Chinese]. *Chin Gen Pract*, 15(3A), 726–728.
- Peters, S., Rogers, A., Salmon, P., Gask, L., Dowrick, C., Towey, M., et al. (2009). What do patients choose to tell their doctors? Qualitative analysis of potential barriers to reattributing medically unexplained symptoms. *J Gen Intern Med*, 24(4), 443-449.
- Phillips, M. R., Chen, H., Diesfeld, K., Xie, B., Cheng, H. G., Mellsop, G., et al. (2013). China's new mental health law: reframing involuntary treatment. *Am J Psychiatry*, 170(6), 588-591.
- Phillips, M. R., Zhang, J., Shi, Q., Song, Z., Ding, Z., Pang, S., et al. (2009). Prevalence, treatment, and associated disability of mental disorders in four provinces in China during 2001-05: an epidemiological survey. *Lancet*, 373(9680), 2041-2053.
- Pratt, L. A., & Brody, D. J. (2008). Depression in the United States household population, 2005-2006. *NCHS Data Brief*(7), 1-8.
- Priest, R. G., Vize, C., Roberts, A., Roberts, M., & Tylee, A. (1996). Lay people's attitudes to treatment of depression: results of opinion poll for Defeat Depression Campaign just before its launch. *BMJ*, 313(7061), 858-859.
- Prins, M. A., Verhaak, P. F., Bensing, J. M., & van der Meer, K. (2008). Health beliefs and perceived need for mental health care of anxiety and depression--the patients' perspective explored. *Clin Psychol Rev*, 28(6), 1038-1058.
- Reavley, N. J., Mackinnon, A. J., Morgan, A. J., & Jorm, A. F. (2014). Stigmatising attitudes towards people with mental disorders: a comparison of Australian health professionals with the general community. *Aust N Z J Psychiatry*, 48(5), 433-441.
- Richards, J. C., Ryan, P., McCabe, M. P., Groom, G., & Hickie, I. B. (2004). Barriers to the effective management of depression in general practice. *Aust N Z J Psychiatry*, 38(10), 795-803.
- Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Australian e-journal for the Advancement of Mental health*, 4(3), 218-251.
- Rickwood, D., Thomas, K., & Bradford, S. (2012). *Review of help-seeking measures in mental health: an Evidence Check rapid review brokered by the Sax Institute for beyondblue*. New South Wales: The Sax Institute.
- Rosso, I. M., Killgore, W. D., Olson, E. A., Webb, C. A., Fukunaga, R., Auerbach, R. P., et al.

- (2017). Internet-based cognitive behavior therapy for major depressive disorder: A randomized controlled trial. *Depress Anxiety*, 34(3), 236-245.
- Sartorius, N., Ustün, T. B., & World Health Organization. (1995). *Mental illness in general health care : an international study*. Chichester Wiley.
- Shen, Y., Qian, D., Du, Z., & Feng, W. (2006). Data Analysis of 1570 New Cases of Community Psychological Clinic [in Chinese]. *China Journal of Health Psychology*, 14(6), 716-717.
- Simon, G. E., VonKorff, M., Piccinelli, M., Fullerton, C., & Ormel, J. (1999). An international study of the relation between somatic symptoms and depression. *N Engl J Med*, 341(18), 1329-1335.
- Sjostedt, C., Ohlsson, H., Li, X., & Sundquist, K. (2017). Socio-demographic factors and long-term use of benzodiazepines in patients with depression, anxiety or insomnia. *Psychiatry Res*, 249, 221-225.
- Slade, T., Johnston, A., Oakley Browne, M. A., Andrews, G., & Whiteford, H. (2009). 2007 National Survey of Mental Health and Wellbeing: methods and key findings. *Aust N Z J Psychiatry*, 43(7), 594-605.
- Sun, K. S., Lam, T. P., Lam, K. F., & Lo, T. L. (2015a). Managing common mental health problems: contrasting views of primary care physicians and psychiatrists. *Fam Pract*, 32(5), 538-544.
- Sun, K. S., Lam, T. P., Lam, K. F., & Lo, T. L. (2015b). Obstacles in Managing Mental Health Problems for Primary Care Physicians in Hong Kong. *Adm Policy Ment Health*, 42(6), 714-722.
- Sun, K. S., Lam, T. P., Lam, K. F., Lo, T. L., Chao, D. V., & Lam, E. W. (2016). Barriers of Chinese primary care attenders to seeking help for psychological distress in Hong Kong. *J Affect Disord*, 196, 164-170.
- Sun, K. S., Lam, T. P., Lam, K. F., Piterman, L., Lo, T. L., Chao, D. V. K., et al. (2017). Help-seeking behaviours for psychological distress amongst Chinese patients. *PLoS One*, 12(10), e0185831.
- Tang, Y. L., Sevigny, R., Mao, P. X., Jiang, F., & Cai, Z. (2007). Help-seeking behaviors of Chinese patients with schizophrenia admitted to a psychiatric hospital. *Adm Policy Ment Health*, 34(2), 101-107.
- Tao, X. J., Wang, L. P., & Cui, G. Y. (2015). Use of antidepressants in enterprise-affiliated hospital before and after national health insurance reform [in Chinese]. *China Pharmaceuticals*, 24(21), 169-170.
- The WHO World Mental Health Survey Consortium. (2004). Prevalence, Severity, and Unmet Need for Treatment of Mental Disorders in the World Health Organization World Mental Health Surveys. *JAMA*, 291(21), 2581-2590.
- Thompson, A., Hunt, C., & Issakidis, C. (2004). Why wait? Reasons for delay and prompts to

- seek help for mental health problems in an Australian clinical sample. *Soc Psychiatry Psychiatr Epidemiol*, 39(10), 810-817.
- Thornicroft, G., Chatterji, S., Evans-Lacko, S., Gruber, M., Sampson, N., Aguilar-Gaxiola, S., et al. (2017). Undertreatment of people with major depressive disorder in 21 countries. *Br J Psychiatry*, 210(2), 119-124.
- Tylee, A., Freeling, P., Kerry, S., & Burns, T. (1995). How does the content of consultations affect the recognition by general practitioners of major depression in women? *Br J Gen Pract*, 45(400), 575-578.
- Tylee, A. T., Freeling, P., & Kerry, S. (1993). Why do general practitioners recognize major depression in one woman patient yet miss it in another? *Br J Gen Pract*, 43(373), 327-330.
- Walters, P., Tylee, A., Fisher, J., & Goldberg, D. (2007). Teaching junior doctors to manage patients who somatise: is it possible in an afternoon? *Med Educ*, 41(10), 995-1001.
- Weich, S., Lewis, G., Donmall, R., & Mann, A. (1995). Somatic presentation of psychiatric morbidity in general practice. *Br J Gen Pract*, 45(392), 143-147.
- Wong, D. F., Xuesong, H., Poon, A., & Lam, A. Y. (2012). Depression literacy among Chinese in Shanghai, China: a comparison with Chinese-speaking Australians in Melbourne and Chinese in Hong Kong. *Soc Psychiatry Psychiatr Epidemiol*, 47(8), 1235-1242.
- Wong, D. F. K., & Li, J. C. M. (2014). Cultural Influence on Shanghai Chinese People's Help-Seeking for Mental Health Problems: Implications for Social Work Practice *The British Journal of Social Work*, 44(4), 868-885.
- World Health Organization. (2008). *Integrating Mental Health into Primary Care: A Global Perspective*. Geneva: World Health Organization.
- Wu, H., Xu, Y., Xu, Y., Song, L., Zhu, H., & Zhu, L. (2007). Doctors' knowledge and attitudes towards geriatric depression in community health center in Shanghai [in Chinese]. *Shanghai Archives of Psychiatry*, 19(6), 341-344.
- Xiong, W., & Phillips, M. R. (2016). Translated and annotated version of the 2015-2020 National Mental Health Work Plan of the People's Republic of China. *Shanghai Arch Psychiatry*, 28(1), 4-17.
- Yang, L. H., Kleinman, A., Link, B. G., Phelan, J. C., Lee, S., & Good, B. (2007). Culture and stigma: adding moral experience to stigma theory. *Soc Sci Med*, 64(7), 1524-1535.
- Yang, L. H., Purdie-Vaughns, V., Kotabe, H., Link, B. G., Saw, A., Wong, G., et al. (2013). Culture, threat, and mental illness stigma: identifying culture-specific threat among Chinese-American groups. *Soc Sci Med*, 88, 56-67.
- Yap, M. B., Reavley, N. J., & Jorm, A. F. (2012). Associations between awareness of beyondblue and mental health literacy in Australian youth: Results from a national survey. *Aust NZ J Psychiatry*, 46(6), 541-552.
- Yu, F. S., Yip, B. H., Kung, K., Fung, C. S., Wong, C. K., Lam, A. T., et al. (2015). The

Association of Types of Training and Practice Settings with Doctors' Empathy and Patient Enablement among Patients with Chronic Illness in Hong Kong. *PLoS One*, 10(12), e0144492.

Zhang, W., Li, X., Lin, Y., Zhang, X., Qu, Z., Wang, X., et al. (2013). Pathways to psychiatric care in urban north China: a general hospital based study. *Int J Ment Health Syst*, 7(1), 22.

Zhang, Y., Tang, W., Zhang, X., Zhang, Y., & Zhang, L. (2015). National Health Insurance Development in China from 2004 to 2011: Coverage versus Benefits. *PLoS One*, 10(5), e0124995.

Zhou, Z.-h., Huang, W.-j., Chen, S.-y., Guo, J.-z., & Jin, S.-h. (2012). Patient Reasons for Encounter and Problems Managed at A General Practice Clinic Affiliated to A Tertiary Hospital [in Chinese]. *Chinese General Practice*, 15(8B), 2652-2655.

Zhou, Z.-h., Huang, W.-j., Jin, S.-h., Guo, J.-z., & Chen, S.-y. (2012). Prevalence and management of mental disorders in general practice clinic of general hospital [in Chinese]. *Chinese General Practice*, 15(9A), 2942-2945.