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Review

Mental health in Vietnam: Burden of disease and availability of services

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ABSTRACT

Purpose: Despite the accomplishments, the economic and social reform program of Vietnam has had negative effects, such as limited access to health care services for those disadvantaged in the new market economy. Among this group are persons with mental disorders. This paper aims to understand the burden of mental disorders and availability of mental health services (MHS) in Vietnam.
Methods: We reviewed both national as well as the international literature about the burden of mental disorders and MHS in Vietnam. This included academic literature (Medline, Pubmed), national (government) reports, World Health Organization (WHO) reports, and grey literature.
Results: The burden of mental disorders in Vietnam is similar to that of other Asian countries and occurs across all population groups. MHS have been made one of the national health priorities and more efforts are being made to promote equity of access by integrating MHS into other health care programs and by increasing MHS capacity. However, it is not yet sufficient to meet the care demand of persons with mental disorders. Challenges remain in various areas of MHS, including: lack of mental health legislation, human resources, hospital beds, shortage and diversification of MHS.
Conclusion: Although MHS in Vietnam have considerably improved over the last decade, mainly in terms of accessibility, the care demand and the illness burden remain high. Therefore, more emphasis should be put on increasing MHS capacity and on human resource development. In that process, more representative epidemiological data and intervention research is needed.

Contents

1. Introduction

Beginning in 1986, Vietnam initiated an economic and social reform program called Doi Moi. The main policies of this program were de-collectivization of agriculture, trade liberalization, attracting foreign direct investment and privatization of state-owned

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enterprises. Thus far, Vietnam has made considerable progress in the economic and social well-being of the population. These accomplishments were the subject of remarks by the World Bank: '*Vietnam's poverty reduction and economic growth achievements in the last 15 years are one of the most spectacular success stories in economic development*' (World Bank, 2008). Nevertheless, the Doi Moi program has also had some negative side effects, such as larger disparities in access to social and health services among different geographical regions and income groups. These negative effects have been found especially among those who are less successful in the new market economy (Beresford, 2008; WHO, 2005; Adams, 2005). Accessibility to health care services is partly hampered by official and unofficial payments for health services and pharmaceuticals, and private out-of-pocket spending may represent as much as 75% of total spending on health care (Witter, 1998; World Bank, 2004; Dao et al., 2008). Increase in drug and alcohol use, as well as other social stressors have been found to be consequences of the Doi Moi (Hoblyn et al., 2009; Volkow, 2009; Martin et al., 1996; Boyle and Offord, 1991). Moreover, Vietnam had to live through three major wars in the last century, which has had an impact on both the burden and provision of MHS in Vietnam. The aim of this paper, therefore, is to understand the burden of mental disorders and availability of MHS since the implementation of the Doi Moi policies.

2. Methods

We reviewed national as well as international literature regarding MHS and mental disorders in Vietnam by searching academic literature on PubMed, Medline using the following key words or combinations of key words: mental disorder; epilepsy; psychiatry; mental health (service) and Vietnam. Unfortunately; the body of academic literatures is still very limited. To fill in this gap, we also searched for grey national and international literature, including government reports; WHO reports and mass media; using Google and Google Scholar.

3. Mental disorders in Vietnam

Mental disorders make a substantial contribution to the illness burden in all countries. According to the World Health Organization's World Mental Health Survey Initiative conducted in 17 countries, the highest lifetime prevalence of mental disorder (DSM-IV) occurred in the USA (47.4%) and the lowest in Nigeria (12.0%). The Asian countries had relatively low prevalence ranging from 13.2% in China, 14.4% in Iran to 18.0% in Japan (Kessler et al., 2007; Fakhari et al., 2007). In Vietnam, mental disorders have not been adequately researched. A national representative epidemiological survey on 10 common mental disorders in the period 2001–2003 showed that the 10 most common mental disorders combined had a prevalence of approximately 14.9% of the population. Estimating from this result about 12 million people are in need of MHS. The most prevalent of these are alcohol abuse (5.3%), depression (2.8%) and anxiety (2.6%) (Table 1) (NPHNo1, 2002).

The propagation of illegal drugs from rural and mountainous areas to urban areas led to a dramatic increase in drug abuse from 78 drug addicts per 100,000 population in 1994 to 208 per 100,000 in 2004 (Nguyen and Scannapieco, 2008). Regarding alcohol abuse, 16.3% of the men were at-risk of becoming dependent on alcohol (defined here by a daily average of >2.4 standard drinks); 7.9% were alcohol dependent and 1.97% were harmful users (Giang et al., 2005). Minh et al. (2008) found that 66.7% of men between the age of 25 and 44 years consumed more than 3 standard drinks per day in the previous month, notably higher rates than men aged 45–64 years (59%) and men aged 65–74 (53.4%) (Minh et al., 2008).

Table 1
Prevalence of 10 common mental disorders.

Mental disorder	ICD	Prevalence (%)
Alcohol abuse	F10.1	5.3
Depression	F32	2.8
Anxiety	F41	2.6
Juvenile behavioral disorder	F91.0	0.9
Old age amnesia	F00–F04	0.9
Slow mental development	F70–F73	0.6
Cerebro cranial trauma	F07.2	0.5
Schizophrenia	F20	0.5
Epilepsy[a]	G40	0.3
Drug use	F11	0.3

Source: Unpublished report of National Psychiatric Hospital No 1 submitted to Vietnam Ministry of Health.

[a] Since epilepsy is part of the management of mental health care provision in Vietnam, it is approached as a 'mental disorder' although the ICD classifies it as disease of the nervous system.

Supporting results, one study using AUDIT[1] (defined as an AUDIT score greater than 7 in men and 5 in women) noticed that prevalence of alcohol consumption-related problems were 25.5% for men and 0.7% for women (Giang et al., 2008).

Depressive disorders have the second highest prevalence among mental disorders (NPHNo1, 2002). A more recent national community-based study among 14–25 years old showed that 32% of them experienced sad feelings about their life in general, 25% felt so sad or helpless that they could no longer engage in their normal activities and found it difficult to function, and 21% felt disappointed about their future, 0.5% reported to have made a suicide attempt and 2.8% tried to deliberately injure or harm themselves. The highest suicide attempt rate was reported for young males, particularly among 18–21 year olds, which stood at 6.4% for those living in urban areas and 4.1% for those living in rural areas (MOH, 2005). Similar results were also found by Huong et al. (2006) who found prevalence rates of 8.9% for life time suicidal thoughts, 1.1% for suicide plans and 0.4% for suicide attempts. They concluded that suicidal thoughts are associated with similar negative psychosocial risk factors, lifestyle and emotional problems as in Western and other Asian countries (Huong et al., 2006). Additionally, Fisher et al. (2004) reported that 33% of women who attend general health clinics in Ho Chi Minh City were depressed, and that 19% of them explicitly acknowledged experiencing suicidal ideation. A nationwide survey showed that 20% of mothers of 1 year olds suffer from depression or anxiety rates possibly relevant to 8–16.9% maternal deaths (within 42 days of postpartum) by suicide (Tuan et al., 2004; WHO, 2005).

Epilepsy has a rather ambiguous status in Vietnamese health care from an international perspective. Since epilepsy is treated and managed within the mental health system, it is approached and regarded by policy makers as a mental disorder, although the ICD-10 classifies it as a disease of the nervous system. As a result it has an influence on the demand for MHS and subsequently the planning of these services. It therefore needs to be discussed here. The prevalence of epilepsy estimated by Le et al. (2007) is about 7.5 per 1000 population (active epilepsy is 5.5/1000) 33.9% of whom are between 10 and 20 years of age (Le et al., 2007); While another study by Tuan et al. (2008) found a lower prevalence of 4.4 per 1000 population (95%, CI 3.8–5.0). These results are similar to other Asian countries but lower than African and Latin American countries (Tuan et al., 2008).

The awareness of the population with regard to mental disorders is rather limited. This may explain why stigmatization and discrimination pose a large problem. According to Hoi

[1] AUDIT Alcohol Use Disorders Identification Test developed by World Health Organization.

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(director of Maihuong day care Hospital in Hanoi) 'whenever people think about mental illness, they will certainly think about madness and strange behavior' (Hong, 2008) or as Weiss (2007) commented 'The stigma associated with mental health concerns in Vietnam is even greater than in Western countries'. This assertion is partly supported by findings of Tuan et al. (2007) that of the 67.0% of the respondents who had heard about epilepsy, 10% of the respondents thought that it is a form of insanity, and 36.3% of the respondents would object to their child being friends with somebody suffering from epilepsy. Moreover, 67.4% assumed that people with epilepsy should be denied a job (Tuan et al., 2007). It seems that the situation has improved since the implementation of the National Health Target Program (NHTP, discussed below) with a community-based mental health program (CBMHP) as one of its pillars. Yet about 50% of the population still have limited awareness about this issue according to an estimate by a director of a leading mental health hospital (Hong, 2008).

4. Mental health care provision in Vietnam

4.1. Policy and legislation

Although Vietnam does not have an explicit mental health law, the 1989 Law on Protection of People's Health recognizes and affirms that all people have an equal right to health care and treatment. It protects certain rights of the mentally ill by explicitly stating the conditions in which a doctor must get a relative's consent before beginning treatment and conditions in which involuntary treatments are permitted.

Mental health policy has since 1998 been declared as one of the main targets of the NHTP (WHO, 2001). The specific goal of this program was to improve MHS by increasing and strengthening community-based mental health care (Vietnam Government, 1998). Other key aspects of the program were detection, treatment and community reintegration of an estimated 50,000 persons with schizophrenia (Vietnam Government, 2001). Since 2002, two additional mental disorders, i.e. depression and epilepsy, were added to the NHTP as part of an initiative on non-communicable disease prevention and control for the period 2002–2010. The goal is to reduce the prevalence rate and mortality rate of epilepsy as well as to prevent epileptics from hurting themselves or their environment, in addition to reducing the number of depressed patients and suicides due to depression (Vietnam Government, 2002). In parallel with the NHTP, the Vietnamese government launched a policy to give funds to provinces or cities to enable them to provide a minimum support of 65,000 VND (about US$3.60) per month for the mentally ill living alone or in poor families. People with mental disorders who choose to live in a homecare center receive a minimum support of 140,000 VND (US$7.70) per month. As result of this decentralized policy approach, the actual amount that provinces or cities pay out may be higher and depends on the public budget of the respective province or city (Vietnam Government, 2004).

4.2. Organization of mental health services

Mental health care is provided by a catchment area system built upon Vietnam's 4 tier system (central, province, district and commune) with two major types of services i.e. community-based and hospital-based.

The community based service (CBS) is provided by more than 700 outpatient mental health facilities. These facilities include 30 outpatient departments of central and provincial level mental health hospitals, about 35 mental health departments that belong to the provincial center for social disease control and prevention or provincial mental health dispensaries, and 642 mental health divisions of each district preventive health center. In addition, apart from being one of the primary health care providers, 6278 commune health stations (per total of 10,750 communes equal to 64%), function as gatekeepers to the health care system and have gained an additional role in mental health care. This new role has been found through integration of mental health into other community-based health care programs (GSO, 2009). The CBS is responsible for mental health promotion, scanning, early detection and managing the treatment of mental disorders in the community. Moreover, emphasis is put on patient follow-ups and implementation of the CBMHP at the community level. This service has been implemented in 64% of communes and in 100% of provinces and cities. Therefore, the community based mental health program is now providing approximately 60–70% of the population with free access to essential psychotropic medicines for some prioritized mental disorders such as schizophrenia, depression and epilepsy (where they have availability of at least one psychotropic medicine of each therapeutic class of anti-psychotic, antidepressant, mood stabilizer, anxiolytic, and antiepileptic medicines). For those not living in a commune covered by the program, free access to these medicines is possible as well but requires more effort, as patients will have to go to a provincial mental health dispensary or go to another commune where the program is available. Alternatively, they can pay for these medicines. Basic medication is relatively affordable. One day anti-psychotic medication and antidepressant medication cost about 33% (US$ 0.38) and 13% (US$ 0.16) of one day's minimum wage respectively (WHO, 2006a).

The hospital service is provided by 2 central mental health hospitals, 31 provincial mental hospitals, 23 psychiatric departments in the general provincial hospitals, 2 daycare hospital/clinics, and 1 child/adolescent inpatient clinic. The two central mental health hospitals are authorized by the Ministry of Health to plan, manage, coordinate, monitor and conduct quality assessment of all MHS in Vietnam. The number of beds for mental health patient amounts to 5000, or 6.08 beds per 100,000 population, compared to 151.3 total hospital beds per 100,000 population. The hospital bed occupancy rate in mental health hospitals stood at 122.9% in 2004. Although the number of mental health hospital beds was increased by 6% (300 beds) in the period 2000–2004 and by even 16% in the period 2004–2008, the occupancy rate remained at 122.6% (MOH, 2004a, 2008). Approximately 4% of beds in mental hospitals are reserved for children and adolescents only (WHO, 2006a; MOH, 2004b). To put these numbers in perspective, both the mental health bed rate in general and the mental health bed rate for children and adolescents of Vietnam is rather low compared to Thailand (13.8 beds/100,000 of population; 9% of total mental health beds) and China (6.79/100,000; 5%) but higher than in the Philippines (5.57/100,000; 2%) (WHO, 2006b, 2006c, 2007).

4.3. Human resources

The human resources working in both the CBS and the hospital-based service included only 286 psychiatrists, counting those who had at least six months of mental health training, which equals 0.35 psychiatrists per 100,000 population (in 2004) (all psychiatrists work for mental hospitals, as no psychiatrist works for outpatient facilities). In the same year, the rate for general physicians working in mental health facilities (730) was 0.90 per 100,000 population. Even when general physicians are included, the rate of doctors in mental health was still small compared to the total country rate of 61 medical doctors per 100,000 population in 2004 (WHO, 2006a) and to the more recent (2008) number 67 medical doctors per 100,000 population (GSO, 2010).

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Table 2
Number of human resources working in mental health care in Vietnam and selected countries from the region per 100,000 populations (2004).

Country	Psychiatrist	Doctors (not specialized)	Nurse	Psychologist	Social worker	Occupational therapist	Other health worker
Vietnam	0.35	0.90	2.10	0.06	0.15	0.005	0.80
China	1.40		3.20				1.50
Thailand	0.66	0.17	3.81	0.26	0.74	0.20	1.45
Philippines	0.42	0.17	0.91	0.14	0.08	0.08	1.62

Source: WHO–AIMS report on mental health system in Vietnam. WHO, 2006; WHO AIMS reports Vietnam, the Philippines, Thailand and China (only Hunan province).

The total number of psychiatrists and doctors working in the mental health field is on the same level as the other countries nearby and higher than Thailand and Philippines. If only taking into account the proportion of actual psychiatrists, the rate is much lower than in neighboring countries (Table 2). In terms of other mental health professionals, there were 2.1 per 100,000 (1700) nurses working in the mental health field, compared to 81.9 per 100,000 nurses in all fields in 2004 (103.4 per 100,000 in 2008) (WHO, 2006a; GSO, 2010). Furthermore, also in 2004, there were 50 psychologists, 125 social workers, 4 occupational therapists and 650 other mental health workers (WHO, 2006a).

Regarding the development of human resources, mental health is now facing a huge problem. Psychiatry is among the least preferred post-graduate specialities in the country. Of the 2500 new medical graduates per year, none studied psychiatry and only about 30 chose psychiatry as a speciality in postgraduating training. In 2004, there were no psychiatric nurses, psychologists, psychiatric social workers, occupational therapists or mental health workers who graduated with a minimum of one year training in the mental health area.

4.4. Inpatient and outpatient care

Outpatient mental health care is mainly provided by the CBS, whereas inpatient mental health care is provided by the hospital-based service. At the present time, the focus of the system is still on hospital-based rather than CBS. However, this focus is rapidly shifting. In 2004, outpatient facilities treated a total of 46,070 patients (56.9/100,000 population), 39% of whom were female and 17% children or adolescents (WHO, 2006a). By 2008, this number had almost tripled to 126,600 patients (150/100,000 population) (MOH, 2008). In 2004, less than 20% facilities of the CBS could offer psychosocial intervention. The hospital service treated 57,500 patients, equal to 71 patients per 100,000 population (see Table 3), with an average of 35 hospital days per patient. The daycare facilities treated about 3,000 patients (3.7/100,000 population), an average of 40 days per patient per year. The most common mental disorders upon hospital admission are schizophrenia, schizotypal and delusional disorders (60%), mood (affective) disorders (15%), as well as neurotic, stress-related and somatoform disorders (15%). About 60–70% of them received a psychosocial intervention. Involuntary hospital admission make up 1% of all cases, and about 2–5% of patients in mental hospitals were restrained or secluded at least once (WHO, 2006a).

In total, about 132 people per 100,000 population in 2004, which equals about a quarter of the proportion of people treated in the Chinese MHS in the same year (Table 3), and a rough estimate of 250 people in 2008 per 100,000 population, were treated by the outpatient and inpatient MHS in Vietnam, roughly equal to 10–15% of these persons had one of the prioritized mental disorders in Vietnam (schizophrenia, depression, and epilepsy).

5. Discussion

Although research on prevalence of mental health disorders in Vietnam is increasing, there is still a need for comprehensive epidemiological studies on the prevalence of mental disorders. Available evidence indicates that mental disorders are very common conditions and their prevalence rates are similar to those of other Asian countries. They also occur across all population groups.

There are efforts to promote equity of access to MHSs through an integrated approach supported by the CBMHP (part of the NHTP). The network providing MHS includes specialized psychiatric hospitals, psychiatric departments in general hospitals, psychiatric departments in pediatric hospitals (all providing inpatient and outpatient care), psychiatric day care hospitals; psychiatric clinics for children and adolescents, clinics especially reserved for forensic mental disorders as well as outpatient mental health facilities. Essential psychotropic medicines are available in all clinical facilities from health commune stations up. However, the MHS system is not completely built yet as it does not cover all people and as a result still reveals accessibility problems. Activities of the program are still rather limited and mainly focus on mental health promotion, prevention, screening, early detection and managing the treatment of mental disorders in the community through monthly check ups and provision of drugs for schizophrenia, epilepsy and depression. In contrast to this, the controlling of risk factors, rehabilitation and health education (knowledge, attitude, practice, behavior) of the population have thus far not been targeted and strengthened. In addition, programs for home care, as well as children and adolescent mental health care are lacking.

Although, the number of mental hospital beds was increased in the last decade, there is still a substantial gap with the demand for such services. This is in contrast to some Western countries, where the number of mental hospital beds are declining and care is provided if possible at the primary level, rather than institutionalizing patients. Even though there is a focus on secondary and tertiary care in Vietnam, this does not mean that these services are always abundant and accessible. Some mental health hospital services are very limited in terms of quantity, especially day care

Table 3
Number of treated mental patients in Vietnam and selected countries from the region (2004).

Country	No of user/100,000 population treated in hospital network	No of user/100,000 population treated in community-based program
Vietnam	71	56.9
Philippines	13.6	135
Thailand	158	n/a
China	35.5	454

Source: WHO, 2006.

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and hospital care exclusively for children and adolescents. An explanation is that MHS for children in Vietnam are limited due to the prioritization of other health problems, such as infectious diseases and malnutrition (McKelvey et al., 1997).

Our review found that the rate of patients accessing MHS is increasing but still low compared to other countries. That may partly be explained by the fact that many people with mental health needs may access private health care providers or other specialized health care service rather than MHS. This is plausible since Vietnam has a sizeable private health care sector, mainly consisting of outpatient clinics. Yet data on mental patients in the private sector is lacking or anecdotal. Stigmatization of mental illness is also an important issue (Thuan et al., 2008).

The Vietnamese MHS is challenged by a lack of human resources. When compared to other Asian countries in the region, the proportion of physicians working in the mental health field in Vietnam is fairly average, but the proportion of psychiatrists is below the proportion of countries such as China and Thailand. This is the result of insufficient training of psychiatrists. Hence, the largest future challenge for the Vietnamese mental health care field is to attract mental health workers. However, training of primary care staff, e.g. psychiatric nurses, is limited and complicated by the absence of psychiatric/mental health topics in the nursing curriculum and the lack of psychiatric nursing textbooks and periodicals in Vietnamese (Goren, 2007).

6. Conclusion

The provision and accessibility of MHS in Vietnam was considerably improved over the last decade. However, the care demand of persons with mental disorders has not yet been met and the illness burden remains high. The CBMHP needs to be expanded to include more mental disorders and cover more people. In addition, the capacity of MHS needs to be increased by diversifying specialized services and by educating and training more human resources. Lastly, our review signals the need for more representative epidemiological data and intervention research in mental health services. This will be the key to address the challenges facing Vietnamese MHS effectively.

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