# Mental health literacy: focus on developing countries

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**Abstract**
Mental health literacy refers to knowledge and beliefs about mental disorders which aid their recognition, management and prevention. This is a non-systematic review of published articles on mental health literacy in the general population and among primary healthcare workers, in particular, in developing countries, sourced from Medline, PsychInfo and African Healthline databases (1990-2006). Our review of the literature suggests that public knowledge about mental disorders as medical conditions, and their evidence based treatment strategies, in developing countries may be generally poorly or inaccurately understood. The review also reveals that improving the mental health literacy among primary health care professionals is imperative. Poor mental health literacy can be an obstacle to providing treatment for those in need, and is of particular concern in low and middle-income countries where mental health services are already scarce. It is likely that strategies for improvement will need to be comprehensive and innovative, taking advantage of opportunities and meeting challenges faced in the developing world.

**Key words:** Mental health literacy; Developing countries; Mental health services

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## Introduction

Mental health is an issue of major concern in both the developed and developing world. With a lifetime risk of more than 25% for any psychiatric disorder, most people are either directly or indirectly affected.[1] In fact, psychiatric disorders are estimated to account for 12% of the global burden of disease, yet the mental health budgets of most developing countries constitute a very small fraction of total health expenditure.[1] In the World Mental Health (WMH) Survey conducted in 14 countries (6 less developed, 8 developed), as many as 50% of serious cases of mental illness in developed countries and 85% of serious cases in less developed countries had received no treatment in the preceding 12 months.[2] The situation is further compounded when less developed countries experience long periods of violent political conflict.[3]

While there is a need for more resources for mental health care, existing resources in both developed and developing countries need to be more effectively utilized to improve access to services. The extent to which patients benefit from improved mental health services is influenced not only by the quality and availability of services but also by their knowledge and belief systems.[4] Beliefs about causation and experience may influence patients' beliefs about effective treatment and may also determine the type of treatment that is sought. Recognition of mental illness is another important determinant of treatment-seeking behaviour. The term "Mental Health Literacy" was defined by Anthony F Jorm and colleagues in 1997 as "Knowledge and beliefs about mental disorders which aid their recognition, management or prevention. Mental health literacy includes the ability to recognise specific disorders; knowing how to seek mental health information; knowledge of risk factors and causes, of self-treatments, and of professional help available; and attitudes that promote recognition and appropriate help-seeking."[5]

What Jorm's definition of mental health literacy fails to specify (although perhaps implies) is that the type of mental health literacy that is being referred to is knowledge of evidence-based mental disorders and their treatments.[5] However, to be mental health illiterate may not only mean that one has little or no evidence-based knowledge of mental illness or of treatment but may also mean that the knowledge and beliefs held may be derived from other sources, such as superstitions or cultural and personal beliefs. For example, a South African study of Xhosa families of patients with schizophrenia found that a large proportion of participants

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believed schizophrenia to be caused by possession by evil spirits or witchcraft.[6] A Nigerian study of caregivers of patients with schizophrenia and major affective disorders also revealed a high proportion of caregivers believing that supernatural elements have a role to play in psychiatric illness.[7] Such beliefs in supernatural causes are common in many non-Western countries and may influence the type of treatment that is sought.[5] A phenomenon that should also be acknowledged is that of the placebo effect, and in double-blind randomised controlled studies, this is accepted at over 30% in depression, which may well account for some of the perceived effective traditional healer responses, perhaps more so in the treatment of disorders such as depression and anxiety. Whether the chemicals used in these traditional medications have the desired psychotropic properties however, is an area for further standardised research studies.

Mental Health Literacy should not be confused with the term ''Literacy'', which refers to the ability to read and write. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) further defines literacy as ''The ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts." Literacy is notably one of the key determinants of population health outcomes. It is estimated that more than 25% of the world's adult population is illiterate, the majority of them women and girls in the developing world. Poor literacy is an obstacle to providing care for those in need and is of particular concern in developing countries where mental health care services are scarce. In these settings, high levels of illiteracy contribute significantly to the disease burden of poorer communities.[8] However, more work needs to be done to demonstrate the true nature of the association between low general literacy (the ability to read and write), low mental health literacy, and disease burden.

In this paper, we review literature published in MEDLINE, PsycINFO and African Healthline (January 1990 to August 2006), focusing on mental health literacy issues in developing countries. Search terms for this non-systematic review included 'mental health', 'mental health literacy', 'mental health education', 'mental health services', 'health literacy', and 'developing' /'low income'/ 'middle income' countries'.

## Mental health services in developing countries

The prevalence of common mental disorders in developing countries has been reported to be at least as common as that in developed countries.[8] Yet mental health care services provided in developed countries surpass both the quality and availability of services in developing countries. Furthermore, many developing countries have deficient or inappropriate mental health care policies.[9,10] Inadequate mental health care may be defined in terms of a range of different indicators, including the number of psychiatrists per population, availability of psychotropic medications, and the level of integration of mental health services in primary care. In countries such as Kenya, the Philippines, Papua New Guinea and Myanmar, there are less than one psychiatrist per million compared with more developed countries where there are 50 to 200 psychiatrists per million.[11] In the Gaza strip, there are 32 psychiatric beds that serve a population of 800 000 people, while in Jordan, a total of 560 beds serves a population of about 5 million people.[3] For most developing countries, less than 1% of the already low health care expenditure is funnelled towards mental health.[12]

Economic inequity in the developing world not only influences the provision of mental health care services but has other direct and indirect negative influences on mental health. For example, a review of 11 prevalence studies conducted across six developing countries (Lesotho, Zimbabwe, Indonesia, Pakistan, Brazil and Chile) found the median prevalence rate of common mental disorders to be in the range of 20% to 30%, with 10 of the studies showing a statistically significant relationship between prevalence of mental disorders and indicators of poverty.[13] Various factors associated with poverty, such as insecurity and hopelessness, violence, physical illness and housing problems, underlie the greater vulnerability to mental illness, and are further compounded by a lack of resources on which to draw when actually faced with illness. Furthermore, a vicious cycle is set up as mental illness worsens economic conditions of the already poor, as the mentally ill may be unable to work, and pose a further financial strain on the economy.[13,14] Such a situation is affected by poor mental health literacy which hinders treatment of mental illnesses. This observation may not be readily noticeable, or given warranted priority in countries already being burdened by health issues such as poverty, HIV/AIDS and other chronic illnesses. A recently published paper highlighted the economic and resource barriers to better mental health practice and policy.[15] The barriers discussed include information barriers, resource insufficiency, resource distribution, resource inappropriateness, resource inflexibility and resource timing. All of these are highly relevant to developing countries, and identifying them would be the first step to addressing the difficult issues that surround mental health services.

## Mental health literacy and its effects

The term mental health literacy has been characterised as comprising several components which include (i) the ability to recognise specific disorders or different types of psychological distress; (ii) knowledge and beliefs about risk factors and causes; (iii) knowledge and beliefs about self-help interventions; (iv) knowledge and beliefs about professional help available; (v) attitudes which facilitate recognition and appropriate help-seeking; and (vi) knowledge of how to seek mental health information.[5] As mentioned previously, literacy may be an important contributor of mental health literacy. This includes basic reading and numerical skills in health care settings, such as being able to understand written and oral information given by health practitioners (doctors, nurses, pharmacists), read consent forms, and follow medication labels.[8] Literacy skills have, notably, been shown to be a stronger predictor of individual health status than age, employment status, ethnic group, or educational level.[16] Low literacy in the mentally ill may have implications for patient care, can impact on doctor-patient communication, written informed consent procedures, accuracy and validity of standardised diagnostic and outcome measures, and patients' ability to follow medication regimens aimed at maintaining mental well-being. In the most comprehensive survey of adult literacy in the United States (National Adult Literacy Survey), adults with self-reported mental health problems had lower literacy skills than the general public, even after education and

other known predictors of literacy were controlled for.[17,18] In addition to lower literacy skills, those who were mentally ill engaged in fewer literacy-related activities, such as reading and writing.

In developing countries, the gap between high prevalence rates of mental illness and low knowledge is arguably even more discordant. A South African study, that formed part of an international survey of mental health advocacy group members suffering from mood and anxiety disorders, revealed that most participants waited 3-5 years before seeking help and stated reasons such as not knowing where to go, wanting to handle the problem on their own, fear of embarrassment and fear of medication, as being contributory.[19] The question of whether improving mental health literacy would improve the mental health of a population remains to be answered. Arguably, this is best attained through the establishment of a mental health literacy campaign and the monitoring of its effects on mental health in a population over time.

In Australia, attention to mental health literacy, and campaigns to improve it started in 1997. A recently published paper, highlights what has been learnt and what still needs to be improved.[20] Developing countries obviously have different challenges, but it may be helpful for developing countries to learn from already established campaigns and tailor them to their specific needs.

**Knowledge, attitudes and beliefs**

Recognition of mental illness is just one aspect of mental health literacy that influences behaviours and attitudes toward the mentally ill. Generally, physical illnesses tend to be associated with fewer stigmas than mental illnesses. This may contribute to high presentation of somatic complaints in patients with underlying mental illnesses in areas where there is low mental health literacy.[21] One South African study that investigated knowledge and attitudes of the public toward mental illness involved presenting respondents with one of eight vignettes portraying various disorders for which they had to identify causes as well as possible treatments.[22] The main finding was that most respondents considered the disorders as being stress-related rather than having a medical aetiology. Perhaps as a consequence, 'talking it over' was more often recommended as treatment than seeking medical advice or taking medication.

Similar findings have been documented in other countries. A Nigerian study conducted in the rural Karfi village, examined knowledge, attitudes and beliefs about causation, manifestation and treatment of mental illness among community-based adults.[23] More than a third of respondents believed drug abuse to be a major cause of mental illness, followed by the will of God (19%), and spirit possession (18%). While 46% of respondents recommended medical treatments, a significant proportion of respondents (34%) favoured spiritual healing. Cultural attitudes and beliefs are closely linked with causal attributions to mental illness and may influence pathways to care. In another Nigerian study, clinically stable out-patients with functional psychotic disorders and their accompanying relatives were surveyed to assess beliefs about causality of mental illness.[24] Beliefs in supernatural causes of illness were widespread among both patients and their relatives. Studies undertaken in Malaysia and Ethiopia suggest that beliefs in supernatural causes result in traditional sources of help being sought.[25,26] In Malaysia it was found that psychiatric patients who believed in supernatural causes were more likely to make use of traditional healers and were less willing to comply with medication. Similarly in Ethiopia, the use of witchcraft, herbalists and holy water were favoured over medical treatment for various mental illnesses. Thus, in many developing countries traditional healers are often the preferred mental health care providers.

Pakistan is one such example where native faith healers are often not only the preferred service providers but are at times the only mental health care providers available.[27] Given that traditional healers are widely used in Pakistan and other developing countries, understanding alternative methods of diagnosis and treatment, is essential as a starting point to including such healers as partners to promoting mental health literacy and treatment adherence. An attempt in this direction was made in one study that investigated the prevalence, classification and treatment of mental disorders among faith healer patrons in Pakistan.[28] Mental state assessments of 139 people attending faith healers were made using the General Health Questionnaire and the Psychiatric Assessment Schedule and were compared to classifications used by faith healers. Little agreement was found between faith healer classifications and DSM-IIIR diagnoses, with faith healer classifications based largely on supernatural causes of disorders. As such, treatment methods employed by faith healers included powerful techniques of suggestion and cultural psychotherapeutic procedures.

**Mental Health literacy among health care workers**

Mental health literacy has also been investigated among health professionals. Yeo et al. compared the mental health literacy of psychiatrically and generally trained nurses in a Singapore psychiatric hospital, and found few significant differences between the two groups in correctly identifying vignettes of depression, schizophrenia and mania.[29] Both groups of nurses were largely accurate in identifying schizophrenia, but were less accurate in diagnosing depression and mania. Despite the low accuracy in identifying the latter two disorders, the nurses distinctly favoured medically-based treatments for mental illness, perhaps attributable to their field of work. The high accuracy in identifying schizophrenia versus depression in this study could be explained by the fact that symptoms of schizophrenia were more distinctly perceived as abnormal, while depressive symptoms were largely viewed as a part of the ebb of normal life experience.

A study investigating nurses' knowledge of mental illness and their attitudes toward the mentally ill in 13 community clinics in the Western Province of South Africa found that the majority (94%) were not able to correctly diagnose the disorders presented in case vignettes.[30] In addition to showing subtle negative attitudes toward people with mental illness, nurses seemed to favour psychotherapeutic treatments over psychotropic drugs, as the latter were perceived to cause brain damage and dependency. These findings are somewhat disconcerting considering that psychiatrically trained nurses are widely regarded as the best equipped at a primary care level to address mental health illiteracy.

Another study using case vignettes found that different health professionals varied in their opinions and attitudes toward the use of medication and alternative medicine in the

management of schizophrenia, depression and individuals without any psychopathology. It was again observed that fewer nurses, and also fewer social, vocational and occupational workers, recommended standard treatment methods, as compared to psychologists and psychiatrists.[31] A psychologist or general practitioner was recommended by a considerable number of health professionals for the vignette that depicted no psychiatric symptoms, indicating a possible problem of overdiagnosis.

These studies illustrate the need for improved dissemination of information not only among the general public but among primary health care workers too, as they are the first medical contact in many rural populations. Improved mental health literacy could facilitate early recognition of mental illness and appropriate treatment seeking, which in turn could reduce the negative effects associated with untreated illness.

**Strategies to improve literacy**

The task at hand then is to establish the most effective way of improving public mental health literacy in developing countries. Awareness campaigns, educational workshops and training courses have been suggested.[32,33,34] Awareness campaigns that are targeted at a population level, using all forms of media, have shown success in a number of developed countries including the USA, UK and Norway.[32] Mental health first aid has been suggested as an alternative strategy. Kitchener and Jorm assessed the efficacy of a Mental Health First Aid training course for improving the mental health literacy in a randomized controlled trial of Australian participants in a workplace setting.[33] Participants were randomized to either participate immediately in the first-aid course or were wait-listed before undertaking the training. The course consisted of 3 weekly sessions of 3 hours each on topics covering mental health crises (e.g. suicide, panic attacks and acute psychotic behaviour) and common mental health problems (depressive, anxiety, substance use, and psychosis). The authors concluded that the training course was successful in improving the public's mental health literacy and noted that such courses may be widely applied. The use of brief educational workshops among secondary school students has also demonstrated success in positively changing attitudes.[34] However the applicability and feasibility of such methods for improving mental health literacy in developing countries requires further study.

It has been suggested that mental health illiteracy in developing countries perhaps forms part of general literacy concerns and that with some developing countries having literacy rates of below 50%, it might be inappropriate to merely adopt strategies (such as the ones described above) based on their success in developed countries.[35] Instead, comprehensive and innovative strategies that take into account the challenges and opportunities present in developing countries may need to be considered. Given the diversity in cultural opinions on mental illnesses in developing countries, a better understanding of the knowledge and belief systems of the target population will arguably enable more effective strategies to be developed and implemented. To be effective, any strategy should not be dismissive of current understandings of mental illness, but should rather try and educate and update individuals and communities about newly acquired knowledge in the field. In addition to high illiteracy, other challenges include inadequate mental health care services, low economic status and poor policy backing. Opportunities in such settings may include the presence of an infrastructure of traditional healers and extended family and community support.[36]

Given that many people seek help for mental illness from providers other than medical doctors, it is essential to include all providers in mental healthcare initiatives.[37] Apart from providing accessibility to mental health services, peoples' family values, cultural beliefs and education must be considered, and common ground established between cultural psychotherapeutic procedures and evidence based medical treatments (see Table I).

**Table I: Summarised Strategy suggestions for Improvement of Mental Health Literacy in Developing Countries**

- Improve mental health budgets of developing countries
- Effectively utilize existing mental health resources
- Identify economic and resource barriers that hinder mental health practice and policy
- Improve dissemination of mental health literacy information among the general population and especially health care workers
- Promote awareness campaigns, including workshops and training courses using all forms of media
- Educate and update traditional healers on newly acquired knowledge in the field without being dismissive of their longstanding cultural beliefs and formulate their inclusion in an appropriate referral system
- Train primary health care workers to identify and deal with common mental disorders
- Maximise the mental health literacy promoting use of the internet

**Primary health care integration**

A strategy suggested and advocated by many to increase literacy while simultaneously increasing mental health care services is the training of primary health care workers to deal with common mental disorders.[38,39] For example, in a semi-rural area in South Africa (where poverty and HIV/AIDS are highly prevalent), training programs for primary heath care nurses have included a focus on the psychological and social aspects of well-being of their patients.[39] Programs aimed at integrating mental health into the primary health care sector have been introduced in many countries including, India, Iran, Pakistan, Uganda, Tanzania, China, Nigeria, Colombia and Sri Lanka, and have been particularly successful in providing mental health care to rural pockets in countries with no previous psychiatric institutional facilities.[38,39] However, controlled data on this type of strategy is clearly needed.

The strategy of training primary health care workers does not come without concerns. Primary health care workers are already tasked with a full range of responsibilities and, being in short supply in developing countries, are faced with the added burden of being overworked. General practitioners in developed countries report barriers to the provision of mental health care, such as length of consultations, increased waiting times for patients, and inadequate training in interviewing techniques.[40] General practitioners in developing countries, arguably, have an even greater responsibility to address mental health issues, especially when a shortage of primary

mental healthcare establishments exists in these countries. It would be beneficial to provide mental health care training to primary healthcare workers, even if training leads only to the identification and referral of patients with suspected mental illness. An effective strategy may be to train primary care workers at various levels so as to distribute the tasks of mental health referral and treatment.

Pakistan has, for example, employed this strategy in its efforts to improve mental health services by providing training for medical officers, administrators, multipurpose care workers and health visitors.[37,38] Its effort in improving mental health literacy is exemplary of an innovative and comprehensive strategy specifically suited to take advantage of opportunities and meet some of the challenges faced in developing countries. Apart from providing training for different levels of health care personnel, the country's strategy has included creating awareness among teachers and students as well as collaborating with traditional healers.[35] Mubbashar and Farooq note that the latter two strategies have proven to be particularly successful. First, schoolchildren have acted as a medium for educating the rest of the community. Second, education of traditional healers has led to increased identification and professional referral of individuals with mental disorders.[41] Increasingly, professionals and consumers are using the internet as a means of accessing health information.[42] This is primarily done in three ways: searching directly for health information, consulting with health professsionals, and participating in support groups. It may be argued, on the one hand, that issues of limited physical access to the internet in developing countries only serves to worsen existing health inequities, information overload, and dissemination of inaccurate and misleading information. On the other hand, the internet provides interactivity, information tailoring, and can serve as a 'window' for identifying deficiencies in health literacy.[43] It may also be used as a vehicle to develop and nurture good mental health literacy skills, particularly in youth. The challenge then is to try and maximise the health-promoting use of the internet, in collaboration with health care providers and literacy skills training programs.[42]

## Research gaps

More intervention research focusing on the relationship between improved health literacy and improved mental health outcomes, and the role of cultural knowledge and belief systems in this relationship, is clearly needed. What are the effects of age and setting on mental heath literacy outcomes? What is the impact of brief versus longer-term interventions? What mental health literacy screening instruments are most appropriate for use in non-Western settings? Directing research efforts to mental health literacy problems will arguably make an important contribution to addressing some of disparities in mental health care in the developing world.[44]

## Conclusion

In conclusion, with the high worldwide prevalence of mental disorder, there is considerable room to improve the state of mental health literacy in developing countries. Poor mental health literacy hinders effective treatment of those in need, contributes significantly to the disease burden in communities where mental health care services are already scarce, and reinforces economic inequalities. However, controlled studies of these associations are clearly needed. Challenges such as high rates of general illiteracy, economic constraints, lack of infrastructure and poor policy backing necessitate comprehensive and innovative improvement strategies. This is particularly crucial given that policy makers, in some instances, have lower than desirable levels of knowledge about psychiatric disorders. Further, there is a responsibility among health care workers in any discipline, and indeed any public servant (e.g., police, paramedics or traditional healers) likely to come in contact with someone with a mental illness, to be literate in mental health issues. Arguably, this could go a long way to stemming the confusion and general stigma surrounding mental illness. In the same way that improvement in health education and literacy are essential tools in preventing and treating physical illness and in fostering community empowerment and participatory health, so too a society that is mental health literate will be better equipped at preventing, recognising and seeking treatment for mental illness. In addition, there is a need to develop novel ways of increasing mental health literacy that are suitable for local contexts, and to then assess whether such interventions actually result in improved mental health.

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