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Mental Health Literacy in Low Middle Income Countries

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ABSTRACT

Mental health literacy is defined as the ability by an individual to recognise specific disorders or different types of psychological distress but is equally relevant to communities. It is learning about not only the knowledge about risk factors and causes of various psychiatric disorders but also self-help, knowledge of professional services and how to seek help and remain well. Low- and Middle-income countries face specific challenges such as financial challenges, poverty, inadequate services etc. This chapter explores mental health literacy focusing on Low Middle Income Countries (LMICs) with special reference to South Asian countries (India, Pakistan, Bangladesh and Sri Lanka). In order to improve populations' mental health, it is crucial to improve the people's understanding of mental illnesses ensuring that all sections of the society and communities in LMIC are involved if mental health literacy is to improve. This chapter also addresses key issues related to components of along with key factors associated with mental health literacy in LMICs. Some suggestions are made to improve mental health literacy in LMICs.

Key words: Low- and middle-income countries, mental health, mental health literacy, public mental health, population health

Mental Health Literacy in Low Middle Income Countries

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Introduction

This chapter will explore mental health literacy in Low Middle Income Countries (LMICs) with special reference to South Asian countries (India, Pakistan, Bangladesh and Sri Lanka). Developing mental health literacy (MHL) of people from all sections of the society and communities in LMIC is paramount in improving mental health and understanding of mental illness. In this chapter we will explore the key factors associated with mental health literacy in LMICs, the current status of MHL and strategies to improve mental health literacy in LMICs.

Mental Health of LMICs

Good mental health is imperative in a person's wellbeing and development, embedded in all facets of an individual's life from work, education, their family and community to their beliefs, faith, environment. According to the World Health Organisation (WHO), one in four people are affected by a mental or neurological disorder globally (The World Health Report, 2001; World Health Organisation, 2020). Major depression is considered to be the second leading cause of disability worldwide and a major contributor to the burden of health problems such as suicide and ischemic heart disease (Whiteford et al, 2013). Due to the prevailing consequences of mental ill-health on both the individual and community development, mental health problems have been stated to be one of the main causes of overall disease burden worldwide. This is particularly a concern among LMICs where limited resources are directed towards mental health (Semrau et al, 2015; World Health Organisation, 2013). The WHO estimates 76 – 85% people in developing countries do not receive any treatment for severe mental health problems, compared to 35 – 50% of people in developed countries.

At the same time, it is worth noting that debate and controversy still surrounds the applicability of concepts, diagnoses and therapies devised in Europe and North America to people and cultures in other parts of the world. The pioneering work of scholars and practitioners such as Arthur Kleinman (e.g. Kleinman, 1980) and Suman Fernando (e.g. 1988) is particularly well known in this area. Moreover, recent editions of the American Psychiatric Associations Diagnostic and Statistical Manual (APA 1994; 2013) have encouraged practitioners to consider cultural factors, with DSM 5 providing a Cultural Formulation Interview to address this (APA 2013 ps. 749-759). Overall then, it is worth earing in mind throughout this chapter that in some significant quarters doubts remain as to whether contemporary diagnostic and therapeutic

practice best serves people from nations, cultures or ethnic groups outside the European, North American or Australasian context.

These doubts come into particularly sharp focus because according to the World Bank Criteria more than 85% of the world's population are living in LMICs, in 153 countries (Jacob et al, 2007, United Nations, Department of Economic and Social Affairs, Population Division 2019). Distribution of LMICs range from all of Africa, most of Asia and South and Central America, Eastern Europe and the Island states of the Pacific. Despite the huge population in LMICs, the gap between mental health needs and available services appears to be quite large. Research suggests that governments in LMICs spend the least amount on mental health worldwide (Saxena et al, 2007). Mental healthcare in LMICs often delivered through psychiatric institutions and there is reluctance to access institutional care and support. In many LMICs funding for mental health services are often limited making it difficult to establish outpatient services for individuals suffering from mental health problems.

Several determinants have been identified to be associated with poor mental healthcare in LMICs, including poverty, socio-economic status (SES), illiteracy, social class, race, ethnicity and household patterns (Maselko 2017). Such social determinants are likely to impact mental illness among individuals living in LMICs. As Maselko (2017) reminds us, research on the social risk factors for mental ill-health in high income countries may not translate directly to the experience in LMICs. However, poverty has numerous effects on individuals including insecurity, violence, physical or mental illness and housing problems. In the face of poverty, individuals experiencing mental health problems will not only face financial issues associated with their help seeking for their mental illness due to their inability to work. This highlights the role of the government and policymakers in addressing mental health issues and barriers in order to overcome such challenges.

In addition to the above factors, we are also faced with the lack of adequate healthcare facilities and the lack of trained health care workers to deliver mental health services. According to the WHOs Mental Health Atlas 2017, there appears to be a global shortage of health workers trained in dealing with mental health, with minimal investment provided for community-based mental health facilities. This is particularly prominent among LMICs where the distribution of available mental health services to the aggregate population seems to reflect unmet needs. To illustrate, the rate of mental health workers can be seen as low as 2 per 100,000 population in LMICs. Comparatively in high income countries, there are 70 healthcare workers per 100,000 population. Approximately 1 in every 10 person needs access to mental health care at any given time, thus mental health needs may be left unaddressed, resulting in poor mental health outcomes.

What is Mental Health Literacy?

Good mental health is recognised as an integral part of a person's wellbeing and development embedded in all aspects of life, their beliefs, faith, culture, environment,

spirituality, work, housing, education, family and community respect. Culture and society influence the understanding of mental health, and mental illness, and thus the availability and acceptability of mental health services. Culture also plays a significant role in what types of help people seek, what coping styles and social supports they have, and how much stigma they attach to mental illness. The attitudes and behaviour concerning mental illness often differ markedly in LMICs than from those in high income countries. Mental Health Literacy (MHL) is proposed as a means of enhancing tolerance, self-care, care for others and to reduce stigma.

MHL is defined as 'knowledge and beliefs about mental disorders which aid their recognition, management or prevention' (Jorm et al, 1997). Jorm and colleagues (2000) identify six components of MHL, including:

(1) the ability to recognise specific disorders or different types of psychological distress;

(2) knowledge about risk factors and causes;

(3) knowledge about self-help interventions;

(4) knowledge about professional help available;

(5) attitudes which facilitate recognition, and

(6) knowledge of how to seek mental health information

A more recent definition, (Kutcher and Wei, 2014; Kutcher, Bagnell and Wei, 2015), encompasses the following constructs:

(a) understanding of how to obtain and maintain positive mental health;

(b) understanding mental disorders and their treatments;

(c) decreasing stigma related to mental disorders;

(d) and enhancing help-seeking efficacy.

The health promotion aspects of MHL have also been recognised by the Canadian Alliance of Mental Illness and Mental Health as "the range of cognitive and social skills and capacities that support mental health promotion". Research suggests that individuals with higher levels of MHL are better equipped to identify and manage their mental health problems (Gaddis et al, 2017). Conversely, individuals with low MHL delay help-seeking and are likely to terminate their treatment earlier (Jung et al, 2016). With the growing identification of mental health problems globally, Jorm and his colleagues argue that it is important for individuals to have MHL and take ownership of their mental health (Jorm, 2012).

In 2012, Jorm incorporated the ability to provide support to others dealing with a health problem as an additional dimension of MHL, known as *mental health first aid*. MHL can be deemed a comprehensive model aimed at assisting professionals in better understanding the existing knowledge, attitudes and beliefs individuals hold regarding

mental health, mental distress and mental illness, so that it can be understood whether these existing beliefs or perceptions help or hinder psychological wellbeing and access to mental health support. Furthermore, health professionals can take the necessary steps to assist the individual in achieving optimal wellbeing. According to Campos et al (2015), by assessing the various dimensions of MHL it is possible to identify the factors deterring individuals from seeking help for mental illness. Overarchingly, within this strand of literature, MHL is advocated as a foundation for mental health promotion, prevention, 'first aid' and care, and as a means to enhance tolerance, self-care, care for others and a way to reduce stigma towards mental health (Patel, 2007; Kutcher et al, 2015). The term, MHL incorporates all these elements into one construct, focused on improving both mental health and mental health care outcomes, rather than addressing one aspect of wellbeing or health promotion (Kutcher et al, 2015;2016, Jorm, 2015).

This argument in favour of mental health literacy and the closely related practice of mental health first aid has been persuasive to many researchers and clinicians, and we will review some of the literature applying these concepts shortly. First, in the light of the issues we raised earlier about cross-cultural work in psychiatry, it is worth noting some of the possible limitations of this approach. Examining the questionnaires typically used to assess mental health literacy reveals that the concept involves a number of assumptions; the items are constructed so that someone who subscribes to a 'Western' medical-model notion of mental ill health will appear more 'mental health literate' than someone who does not. It is assumed that the current arrangement of distress, disorientation and social impairment under headings such as 'depression', anxiety', 'post-traumatic stress disorder' and the like represents a fair reflection of human troubles universally and that the treatments available are likely to be benign and effective for everyone. These assumptions are by no means universally agreed even in psychiatry in Europe and North America.

MHL Cultural perspectives

As we have noted, studies assessing MHL have mostly been captured through the lens of Global North (high income countries) adopting the usage of diagnostic and classification systems used mainly in Europe and America. Each country adopts different ways in managing and dealing with mental health problems dependent on their cultural background, mental health needs, and available resources. Symptomology and presentation of mental illness may also differ in LMICs, which has been found in a number of conditions including anxiety (Hoffman and Hinton, 2014), depression (Kleinman, 2004), psychosis (Vermeiden et al, 2019) and major mental disorders more generally (Viswanath and Chaturvedi, 2012). Studies suggest that in areas of low levels of mental health literacy individuals may present with a higher number of somatic complaints when seeking treatment for mental illness (Raguram and Weiss, 2004). Indeed, a growing literature suggests that mental ill health is likely to be accompanied by multiple physical co-morbidities in many nations (Filipčić et al 2020). Furthermore, all individuals express psychological stress differently, which may

lead to differing diagnoses. Indeed, in some studies, multiple diagnoses appear to be the norm rather than the exception, even in the UK and US (Gaderman et al, 2012). There may be key symptoms which are common to many mental disorders, and different aspects of the problem may be prominent in different circumstances (Williams et al, 2020). Due to the far-reaching consequences of poor diagnosis, MHL can be considered crucial among healthcare workers in LMICs. Self-recognition of mental distress and mental illness can be considered equally important in early detection and help-seeking behaviour (Wright et al, 2007). However, it is important to note, that compared to physical health problems, recognising mental disorders is more difficult due to their 'invisible' nature. In addition, the behavioural aspects of mental illnesses may be more noticeable than the cognitive and emotional aspects, and thus may result in difficulty in the recognition of the mental illness (Melas et al, 2013).

Research evidence on cross-cultural approaches to understand the knowledge and beliefs about mental disorders among a European American and Indian population in both USA and India (Altweck et al 2015) suggest that culture plays a major role in help-seeking beliefs among the Indian sample and a minimal role among the European American sample. In addition, while collectivism was positively associated with causal beliefs among European Americans, it was positively associated with lay help-seeking beliefs among Indians. This highlights the role of cultural differences in beliefs regarding mental illness and in particular help-seeking. A study in India (Saraf et al 2018) explored MHL and help-seeking patterns in a group of young women in an urban slum setting in India. MHL was assessed using vignettes on depression and self-harm among 337 young women between 16 and 19 years of age from an urban slum setting. Only 8% of women were able to label the condition as depression. Though suicidality was identified by the majority of participants, 63% did not think it required urgent intervention. Only a few considered mental health professionals as possible sources of help (19.3% for depression and 2.4% for self-harm). The majority of young women felt friends and parents were sources of help, and that stigma and lack of awareness were the reasons for not considering professional help.

As can be seen from these brief vignettes of a couple of studies, the underlying assumption of much of this work is that people should somehow recognise mental disorder in the same way as a health professional trained in the Western tradition, and not to do so represents some sort of lack of mental health literacy. A moment's reflection would suggest it is often not as simple as that. Often local people have their own ways of understanding distress or unusual experiences, means of tackling these, or absorbing problems within communities and families. In addition, responses to self-report questionnaires do not always reflect what people might do in real life. Important questions remain as to whether the research instruments are meaningful in the LMICs in question. Whilst translated into the relevant local languages, the interrelationship of culture, society, beliefs and knowledge in a particular setting may mean that the questionnaire misses the mark where significant local factors are concerned. In trying

to apply mental health diagnoses outside the Western context a number of authors have talked about a 'category fallacy' (Kleinman, 1988a; 1988b; Fernando, 1995) where these categories may not make sense in the new setting. In Kleinman's work, a category fallacy did not just apply to an over-extended diagnostic label but could apply to any overvalued construct. Whilst understanding people's constructions and sense-making where what we call mental health is concerned is important, it is valuable also to reflect critically on whether Western understandings of Mental Health Literacy could be a category fallacy too.

A further strand of work related to mental health literacy has concerned people's beliefs about the symptoms and causes of mental health problems. Ediriweera et al (2012) investigated this aspect of MHL among Sri Lankan informal carers of patients with schizophrenia or depression using a cross-sectional study design. One hundred and nineteen carers were provided with a vignette depicting depression or schizophrenia adapted from an existing MHL survey. Findings suggested that carers perceived the cases in the vignettes as more likely to be violent, compared to the wider community. The findings also highlighted a preference for therapeutic interventions among 86.7 of schizophrenia carers and 91.5% of depression carers. In contrast only 21.7% preferred traditional healers as a mode of treatment. It is interesting to observe that about 72% of schizophrenia and 61% of depression carers indicated the condition to be a sign of personal weakness. Moreover nearly 16% of carers wanted to avoid people with such problems. Despite the stigma prevalent among individuals, findings highlight the desire for medical therapeutic interventions in the care for mental illnesses, compared to the relatively lower preference for alternative methods of treatment.

The preference for clinical, rather than traditional interventions for people suffering the symptoms of mental ill health can be found in many LMICs. Several factors can account for this, including globalisation and the appetite for western influenced mass media. Knowledge of contemporary medical treatments and a belief in their value is associated with a high literacy rate among individuals in some LMICs such as parts of India such as Kerala (where there is 98% literacy). This calls for further research in this area as we have very little empirical data on how information finds its way into cultural beliefs and knowledge and how these in turn may inform the kind of mental health literacy exhibited by the public in LMICs.

According to the socio-cultural model of mental health, poor mental health may occur through interactions between the economic, political, social and cultural contexts of the individual. In South Asian LMICs, where joint family living arrangements are commonplace, this yields a situation where issues within the family tend to be dealt with collectively within the family context. It has been suggested that where there is an increased involvement of family in mental healthcare, those individuals are likely to depend on each other for support (Dev et al, 2017). Due to the collectivist approach taken regarding treatment in such countries, it is valuable for the understanding of

MHL to focus upon the family perspectives and social norms prevalent in that culture. In assessing the perceived causes of common mental health problems in 240 community members and 60 village health workers in India, Kermode et al (2010) found that socio-economic factors were widely believed to exacerbate the risk of mental disorder, whereas biological and superstitious explanations were less widely endorsed. When asked to indicate which groups would be more susceptible to such problems, participants felt that women, people from lower socioeconomic communities and the unemployed were more likely to suffer such problems than young people or older people. This highlights the way that people's understandings of mental ill health often include beliefs about causes and vulnerabilities. This is akin to what Kleinman called 'explanatory models' of illness (Kleinman et al, 1978) and these are worth studying because they may affect preferred sources of help and what people consider to be suitable therapeutic options too.

A study by Ogorchikwu et al (2016) used the same vignettes as Kermode et al (2010), presenting a case of depression and a case of schizophrenia to assess MHL among late adolescents in South India. Participants were disinclined to identify the problems in the vignettes as mental disorders, with only a minority suggesting depression (only 29% mentioned it) or schizophrenia (mentioned by only 1.3%). Participants had favourable attitudes towards informal sources of support such as family members compared to formal source of support such as therapy. The findings also indicated the presence of stigmatising attitudes among this sample. Orgorchikwu et al take the findings to indicate that mental health literacy was low, and advocate urgent education to remedy the situation. However, this may not be the only interpretation of the findings. It may not always be ideal to bandy diagnostic labels around on the basis of a few lines of second-hand description; after all, if a health professional were to do so we probably would not see this as good practice. Several further issues arise with vignette studies and need to be borne in mind when interpreting the results. Firstly, most vignettes are translated from western case studies and are not sensitive to the local cultural context. Studies using vignettes tend to assume there is a single 'correct' diagnosis of mental disorder, and fail to acknowledge that symptoms may be ambiguous or that they may be exhibited and interpreted differently in differing cultural settings. To illustrate, research conducted in the UK among the Punjabi population has found Punjabi women to report symptoms of 'a sinking heart' when reporting psychological distress (Krause, 1989). Similarly, an informant in Fenton's and Sadiq-Sangster's (1996) study commented: *'My heart is weak. I am ill with too much thinking . . .the blood becomes weaker with worry . . . I have the illness of sorrows*' (p.75). This was a woman of South Asian parentage speaking after her nephew had died in an accident. Can this account be reformulated as 'depression', or does labelling what she is suffering as depression lose some of the culturally important information which could lead to her being helped? When the presentation of mental illness symptomology differs, understanding of mental health and mental illness may differ as well, resulting in inadequate measures of MHL. Therefore, MHL screening instruments may not be

appropriate for use in non-western settings such as LMICs and may need to be culturally adapted.

Concerns regarding studies focusing on MHL in LMICs are generally directed towards the measures used to assess MHL. A key difficulty is that researchers often merely translate vignettes and questionnaires from the English-speaking world. Not only do the meanings attached to the issues covered differ in different ethno-linguistic settings, but in the new setting, the assessment tools may not have acceptable psychometric properties and not meet full scale equivalence, making it difficult to adequately determine the validity of the findings (Kutcher et al, 2016; He & van de Vijver, 2012). Furthermore, most assessment tools do not capture all possible aspects of MHL. Studies, adopting the vignette approach to understand MHL are particularly susceptible to this concern, as MHL cannot be entirely assessed via this method. As we have seen in the examples above, this kind of study tends to focus on whether participants can spot a case of, say, depression or schizophrenia from a brief description. This vignette approach does not consider health promotion and does not successfully distinguish between a mental health problem and mental disorder or everyday psychological distress. The use of vignette-based approaches such as those described above therefore has shortcomings, and thus provides only limited evidence in understanding levels of MHL or as a basis for interventions to 'improve' MHL. Studies addressing multiple domains of MHL using a variety of assessment methods, allowing participants to record responses on Likert scales or true or false answers may provide a more robust and comprehensive understanding of MHL. More research focusing on the tools used to assess MHL, broadening both the kinds of mental health literacy assessed and the means by which responses are recorded would be valuable.

Despite these limitations to the concept of MHL in cross cultural research and the disadvantages of some of the methods used to capture it, there may still be a role for investigations of MHL in initiatives to address mental health issues in LMICs. If a more inclusive and comprehensive approach is taken to the variety of mental health literacies which laypeople, and professionals may exhibit, the study of MHL could become an invaluable focus of mental health strategies. It would be possible to develop approaches to mental health care which would harmonise with local beliefs and practices rather than seeking to supplant them. Current strategies used to enhance MHL in LMICs and implications for interventions that could be applied in the context of MHL in LMICs relevant to their cultural beliefs and knowledge are highlighted in the next section.

Strategies to improve MHL in LMICs

To effectively address mental health issues in LMICs, it is essential that appropriately adapted concepts of MHL become a focus of mental health policies and strategies. Ganasen et al's (2007) review of MHL in developing countries, highlighted several strategies to improve MHL. The impact of these strategies alongside several other researched strategies on enhancing MHL in LMICs are outlined here:

1. Improving Mental Health Budgets

In LMICs, the government expenditure towards mental health is less than 1 US$ per capita as compared to high-income countries where more than US$ 80 is spent on mental health per capita. The bulk of the money spent on mental health is directed towards mental hospitals, which provide care for only a small fraction of individuals who might benefit from this kind of care and support. Improving the mental health budget and hence treatment in LMICs can also have positive effects in the economy. A WHO report indicates that every 1 US$ invested in the scalability of treatment for common mental disorders results in a return of US$ 4 in better health and the ability to work. Conversely, no action can prove to be costly. An analysis by the WHO focused on calculating the treatment costs and health outcomes in 36 LMICs between 2016 – 2030, and found that low levels of recognition and access to care for common mental disorders such as anxiety and depression, lead to a global economic loss of a trillion US dollars every year (WHO, 2010; 2013). Such statistics have been used to advocate for increased MHL among both health professionals and the general population. An increase in the mental health budget in LMICs may result in policy level changes in mental health, encouraging more discussion and action surrounding topics of mental health, which in turn can have a positive effect on MHL.

2. Interventions, Awareness Campaigns, Mental Health Workshops and Training

Numerous interventions have focused on improving both mental health and MHL in High Income Countries (HICs). Although interventions exist in LMICs, they appear to be very limited. Jorm (2000) states that improving MHL increases recognition and help-seeking among individuals, resulting in early help-seeking if symptoms of mental illness are present. Due to stigma and poor access to care for individuals in several LMICs, more research and change needs to take place in order to address these challenges and enable productive dialogue between professional and public points of view on MHL and mental illness in general. Along with socio-culturally appropriate understanding of mental health and mental disorders, evidence-based interventions relevant to the local context are also needed to challenge the barriers for help seeking. Educational workshops and training are also required to run these interventions and improve MHL among individuals in LMICs (Sidhaye and Kermode, 2013). Interventions to improve MHL and reduce stigma in LMICs have used various methods, including mobile phones, videos, vignettes, educational workshops, awareness campaigns and training courses.

Awareness campaigns using various forms of media have shown success in reducing stigma and increasing MHL in several HICs. Similar campaigns have been employed in LMICs to address issues in relation to mental health. Maulik et al (2017) assessed changes in knowledge, attitude, behaviour and stigma related to mental health-related help-seeking among participants shown an anti-stigma campaign in South India. Multi-media interventions were used as part of the SMART mental health project for 3 months, across 42 villages in rural Andhra Pradesh, South India. The campaign was

found to be useful in the improvement of attitude and behaviours towards mental health and resulted in a reduction of stigma related to mental-health help-seeking. Social contact and drama were considered to be the most effective interventions. This study which was conducted in 42 villages indicates the effectiveness of multi-media interventions in a large population, however more participatory longitudinal studies are needed in other populations to assess the effectiveness of such interventions.

Findings from this study were echoed in a systematic review by Mehta et al (2015) who assessed the effectiveness of interventions in reducing mental health-related stigma and discrimination in the medium and long term. 11 out of the 72 studies in the review were from LMICs, and found evidence indicating the effectiveness of anti-stigma interventions beyond 4 weeks in relation to increasing knowledge and reducing stigma. Although evidence from this review does not suggest social contact alone is an effective mode of intervention for improving attitudes, this research does indicate that MHL interventions can be considered effective in the long-term via other approaches. Mehta et al note that a good deal of work has focussed on knowledge and attitudes – which can be measured with questionnaires – rather than active discrimination or exclusion in practice. They end with a plea for more research designed with the principles of randomised controlled trials in mind, so as to increase confidence that the interventions in question have been responsible for any changes in attitudes, knowledge or conduct.

Training programs among health workers in Bangalore, India were reported by Armstrong et al (2011), intended to improve their mental health literacy. Seventy community health workers participated in a 4-day training course. The intervention consisted of a pre/post-test methodology using a mental health literacy survey. Findings indicated an increase in the ability to recognise mental ill health from the vignettes, a decrease in recommending unhelpful psychopharmacological interventions and a minor reduction in stigma. Healthcare workers were found to recommend vitamins, tonics, herbal supplements, sleeping tablets, appetite stimulants and hospital admission over physical activity and listening for depression. When focusing on a psychosis vignette, similar advice was elicited, with suggestions to get the individual married in order to cure the illness. No control group was used to compare the findings from this study. Furthermore, the MHL questionnaire used in this study has been criticised for its lack of cultural appropriateness to the sample. Armstrong et al (2011) recommended more comprehensive training for healthcare workers was recommended by the researchers.

In Pakistan, alongside providing training for healthcare workers, the country has also worked on educating schoolteachers, students and traditional healers. According to Mubbashar and Farooq (2001), both these strategies have found to have positive effects on MHL. Schoolchildren have been a means whereby the rest of the community is educated, because of the conversations they have with other family members. Also, education for traditional healers has been attempted. This facilitates greater

identification of problems and increased referrals to mental health professionals for individuals experiencing poor mental health.

School-based MHL interventions for both teachers and students have also been a focus for researchers and changemakers. Phoeun et al (2019) assessed the effectiveness of teachers' MHL training in Cambodia. The study involved 67 teachers and 275 students. Teachers and classrooms were randomly assigned to either a 2-day MHL training program or a control condition. Four teachers in the intervention condition were selected and trained to deliver a 6-week MHL curriculum to students. Teachers' and students' MHL was assessed by means of a battery of self-report questionnaires based on popular measures in use in the English-speaking world before and after the intervention. Results indicated significant improvements in both teacher and students' knowledge and attitudes regarding mental illness. However, as the study only found small-to moderate effect sizes, more research needs to be conducted in order to test the effectiveness of educational interventions on MHL in LMICs.

Mental health promotion interventions have also been researched in LMICs. Barry et al (2013) in a systematic review aimed to assess the effectiveness of mental health promotion interventions for young people in LMICs. The review findings indicated that interventions promoting the mental health of young people can be implemented effectively in LMIC school and community settings with moderate to strong evidence of their impact on mental health outcomes. The studies reviewed examined children in a variety of countries and circumstances, including areas affected by armed conflict. Improvements were noted in outcomes such as PTSD symptoms, aggression psychological difficulties, depression, and anxiety. Whilst not all measures improved in all studies, the findings also suggested feasibility for the interventions to be used for younger children in primary schools in LMICs. However, more evidence regarding the scalability and sustainability for mental health promotion interventions in LMICs is required.

Mental health first aid (MHFA) has been suggested by the same team as promoted the concept of mental health literacy, as a strategy to work in tandem with MHL and support others with mental health problems (Kitchener and Jorm, 2002). The MHFA courses teachers' individuals to recognise symptoms of different mental disorders and mental health crises, how to provide initial help and guide a person towards appropriate treatments and sources of support. Kitchener and Jorm (2000) found the MHFA course to be successful in improving MHL in Australia. Although limited research exploring the impact of the MHFA course in improving MHL is available in LMICs, the MHFA course has been used in various LMICs including Malaysia, Bangladesh, India and Pakistan. Further research exploring the applicability and feasibility of such training in improving MHL is required in LMICs.

Despite the advantages, there are several limitations of existing MHL interventions. Firstly, there appears to be a lack of understanding on how the impact on MHL can be appropriately determined via implementation of interventions. Most MHL interventions

within LMIC literature have not successfully addressed all components of MHL, and thus it is unclear whether MHL has been adequately characterised, especially as this often involves translations of questionnaires devised in English speaking nations, or symptom-spotting from brief vignettes. Other concerns include a lack of generalisability to other cultures or background as interventions and the measures to evaluate them are not culturally adapted based on the specific mental health needs of the LMIC or group. Furthermore, research generally focuses on a focused sample of participants, mostly young adults, or adults. The mental health of older people is also of concern in LMICs and thus investigation of MHL is required among this population. There appears to be a lack of evidence-based and appropriate MHL resources for individuals in LMICs. Some critics have also expressed misgivings about the way that mental health literacy and the associated notion of mental health first aid encourage people to see human distress in terms of inner psychological or physiological deficiencies or malfunctions (Defehr, 2016). Moreover, the vision of a group of people constantly inspecting one another for signs of mental disorder that merit psychiatric intervention is not necessarily an attractive one. Consequently, more research focusing on these issues needs to be conducted.

3. Educate and Update Traditional Healers with Mental Health Information

People in South Asian LMICs may approach traditional healers in relation to health or mental health-related concerns. Schoonover et al (2014) explored the perspectives of patients, families and health community members towards faith healing as a mode a treatment for mental illness in rural Gujarat, India. Individuals who were treated for a mental disorder were found to recommend a doctor over a traditional healer, with individuals reporting improvements in their condition. Coinciding with this, individuals felt that traditional healing can be beneficial. Although patients were dissatisfied with their experiences of traditional healers, it is still a common method of practice in Gujarat, suggesting the collaboration between faith healers and medical practitioners as a potential means of enhancing access to care.

Shankar et al (2006) in his study in rural South India, aimed to delineate understandings of common mental disorders (CMD) and their treatment among traditional healers. Their findings indicated that 42.3% of the clients attending traditional healers met the International Classification of Diseases-10 (ICD-10) Primary Care Version criteria for CMD, with mixed anxiety and depression being commonly detected. Such findings suggest that traditional healers need to be updated with evidence-based education regarding mental health given the prevalence of mental ill health in the presenting complaints of their client base, while keeping in mind their cultural views and beliefs regarding mental health. As we have noted, Western diagnostic and classification methods may not always be appropriate to assess mental illness in patients and MHL among traditional healers or health professional in LMICs. Shankar et al's study used Tamil versions of the Revised Clinical Interview Schedule (CIS-R) and the Short Explanatory Model Interview (SEMI). More research focusing on the issues with such tools need to be conducted. Furthermore, it is also important

to understand the patient's explanatory models of illness, as this will allow for a culturally sensitive and robust method of healthcare and hence treatment outcome.

4. Mobile Interventions

With the growth in popularity of cellular phones in LMICs, mobile interventions have gained some attention as a means of improving MHL and mental health outcomes especially in HICs. When focusing on LMICs, Chandra et al (2014) assessed the acceptability and feasibility of mobile text messages for promoting positive mental health and as a helpline among young women in urban slums of Bangalore, India. Forty girls from urban slums received messages for a month, asking them to call back if they experienced any distressing feelings. 62.5% of participants called back, asking for mental health services and to say they felt good about the messages. 57.5% messaged back regarding their feelings. 62% reported that they felt supported with the mental health messages. However, the sample size in this study is limited, and further research is needed to understand if mobile interventions are an effective method in improving MHL.

In the context of health literacy, Sabswari (2017) has also recommended the utilisation of mobile technology and media for the dissemination of health information in Pakistan. Public service announcements for media and health information gaps via mobile technology have also been suggested. Future studies should explore the impact of digital technology on MHL, mental health outcomes and reduction in stigma among people in LMICs.

5. Utilise the use of the Internet and Media in MHL Interventions

In the UK 95% of adults aged between 16 – 74 are internet users (Office for National Statistics, 2019). Statistics in LMICs may however vary depending on the geographical location, SES and available resources. The daily usage of internet highlights the potential for both the internet and media in promoting MHL among the population and health professionals in LMICs (Keshavan, Shrivastava and Gangadhar, 2010).

With an increase in channels of interactive media communication available via social media, information can be disseminated effectively and efficiently to individuals. Media can play a large role in educating young people about how to look after their social, physical, and mental health (Goodyear and Armour, 2019). It can highlight that mental health can fluctuate over time, that poor mental health need not be a permanent stage and that there are steps they can take to improve their mental health. Media can also play a critical role in signposting young people to sources of support. The internet is likely to increase the public's access to information and to decrease unmet needs. (Christensen & Griffiths, 2000). A survey conducted by Lawlor et al (2008) assessing MHL among an Irish internet users, found high levels of MHL among this group, with a better identification of appropriate pathways to care and views on illness management being consistent with evidence-based treatments. Hence the internet may be an effective platform for promoting MHL. What is less clear at the time of

writing is how this would work effectively in LMICs, as most experience so far is from the English speaking world.

Several internet-based interventions have been implemented in the West as a means to enhance MHL. Gulliver et al (2012) conducted an exploratory randomised controlled trial to understand the effectiveness of internet-based interventions to promote mental health help-seeking in elite athletes in Australia. Results suggest that while a brief MHL and de-stigmatization intervention may improve knowledge and decrease stigma, it does not increase help-seeking. However, as the sample size is limited, further research is needed with a larger sample size.

On a larger level, a systematic review on the effectiveness of web-based MHL interventions was undertaken by Beijnath et al (2016) and found that such interventions were more likely to be successful if they included active ingredients such as structured program, were tailored to specific populations, delivered evidence-based content and promoted interactivity and experiential learning. Overall, the internet was deemed as a feasible method to improve MHL. Research within the LMIC context is however needed.

Despite the positives, several limitations exist with online interventions and online information in general. Firstly, issues surrounding the quality of information exist. The theory of social loafing states that people intrinsically reduce the effort to validate online information as they assume others will have done the cognitive work for them (Shiue, Chui and Chang, 2010). Consequently, people may be overly credulous about material found online, and web-based material may reflect the creator's personal enthusiasms or commitments rather than a more even-handed reflection of the available evidence. Such limitations mean a measured scepticism towards online information may be the best approach to online information lest it do more harm than good. Evidence-based interventions may therefore be useful in assuring quality and effectiveness in enhancing MHL.

The effect of video and media-based interventions requires further research and validation in LMICs. Marshal and Dunstan (2011) explored the MHL of Australian rural adolescents and found naturalistic forms of content such as films or videos to be more effective in enhancing MHL. The study highlights the potential of media and videos to be used as an intervention to improve MHL in LMICs. In countries such as India, films are considered to be a staple source of entertainment (Bhugra, 2006), and thus portrayals of mental disorder and therapeutic options on screen could potentially be another source of knowledge. In LMICs where consumption of pop culture is pervasive, films and media have the power to educate, inform and entertain (Pirkis et al, 2006). Understanding the role of films and media in mental health-related knowledge formation can result in the development of interventions focused on enhancing MHL within LMICs.

Due to financial challenges in LMICs, it may be difficult to fully meet demand from prospective clients, even if people have come to see their distress in terms of mental

health and illness and seen treatment from healthcare professionals. Countries with limited budgets may experience difficulties in providing facilities and shortages of mental health professionals also exist. Increasing the workforce may be an uncertain process because many interventions for training lack quality assurance and evidence-based practices. To improve the MHL of mental health professionals, the media and internet could be used as an effective method for both education and training (Keshavan, Shrivastava and Gangadhar, 2010). However, more research focusing on the effectiveness of the health-promoting elements in such methods is needed.

6. Integration of Mental Health Services in Primary Care

Another strategy to improve mental health outcomes among individuals in LMICs is to improve the MHL of primary healthcare workers, allowing them to deal with the diagnosis of common mental disorders such as anxiety or depression. Primary health care is usually the first mode of contact for individuals dealing with health or mental health problems. In most LMICs, psychiatric institutions such as mental health hospitals are the only form of mental healthcare available. These institutions are usually located in big towns and cities making it difficult for rural populations to easily access them. In instances where mental health treatment in such institutions is sought, several challenges exist. As the patient is often far from home, there is a lack of social support networks, and hospitalisation has a negative impact on their daily lives and ability to work, which may be particularly significant at times of economic instability. Incorporating mental healthcare within primary care means an easier access to treatment and less personal or financial challenges associated with seeking care or assistance for mental health problems in psychiatric facilities (Funk and Drew, 2008). Furthermore, primary care services are not limited to specific health conditions, thus the fear of stigma and marginalisation from the community is minimal, making care more accessible and acceptable for service users and their families.

Programs aimed at encompassing mental health within primary healthcare services have been adopted in various LMICs, including India, Iran, Pakistan, Uganda, Kenya, Uganda, Tanzania, Nigeria and Sri Lanka. The success rate of providing mental health care via such a strategy in rural areas with no psychiatric facilities has also been well documented. An example of the integration of mental health into primary care comes from the Thiruvananthapurum District in Kerala State, India. Since 1999, mental health services have been integrated into primary care in this district. Medical professionals have been trained to diagnose and treat mental disorders as part of their general practice. Services have included diagnosis and treatment, further reviewing and follow up plans, counselling by mental health professionals and further referrals if needed. The programme has also helped in creating community awareness on mental health issues, and thus enhances the MHL of people in the district as well as medical professionals.

Focusing on the clinical outcomes, studies have found a positive impact of mental health care integration into primary care, with some studies even suggesting better care outcomes than psychiatric hospitals. The co-morbidity of physical health

problems with mental disorders is often well recognised by professionals in primary health care services as compared to mental health institutions. Jenkins et al (2013) found that in Kenya when medical professionals had been trained in mental health, they appeared to be knowledgeable about diagnosing and recognising mental disorders. Medical professionals in Kenya were also more aware of the relationship between mental disorders and communicable (malaria, typhoid) or non-communicable diseases (diabetes, asthma). The presence of co-morbidity has serious implications for the diagnosis, treatment, and rehabilitation of individuals, which primary healthcare workers may be more experienced in dealing with, resulting in better health outcomes. Mental health problems often do not occur alone, but frequently in combination with other comorbid conditions (Dare et al, 2019; Sartorius, 2013) so integration may be a better option so as to address the needs of the patient as a whole. Integrating mental health into primary care in Kenya also allowed for a more community-based approach with networks of community chiefs, spiritual leaders, health workers, traditional health practitioners and non-governmental organisations as part of the system. Such an integration encompassed the individual beliefs and needs regarding mental health within their care resulting in a more wholesome and culturally appropriate treatment approach.

The ill consequences of mental health care and neglect of mental health treatment provision among LMICs, has also resulted in the launch of the mental health Gap Action Programme (mhGAP) by the WHO. The mhGAP has focused on scaling up mental health care via integration into primary health care and general medical services. Evidence-based packages of care for prioritised mental, neurological and substance use disorders in non-specialised health care settings have been developed and incorporated in various LMICs to support this process. An example of this comes from Ahrens et al (2020) who implemented an mhGAP training and supervision package among healthcare workers in Malawi. Findings indicated an increase in the knowledge and confidence scores of non-specialist healthcare workers immediately after training as well as after 6 months. Although no significant change in attitude scores was detected, case detection rates were found to immediately increase after training as compared to pre-training. The findings from this study highlight the feasibility of mental health training to be imbedded within primary care, with a possibility in increase of the MHL of specialist and non-specialist healthcare workers.

Despite the advantages of the integration of mental health services into primary healthcare, there exist several concerns coincidingly. Firstly, primary healthcare workers are often responsible for a wide range of tasks and are often in short supply in rural areas in LMICs. The added burden of being overworked may result in in inadequate care for patients experiencing mental health concerns. The provision of mental health care within primary services may also come with shortcomings such as a limited consultation length, increased waiting times and inadequate training to deal with various mental disorders. This is of particular concern in LMICs due to the

shortage of mental healthcare facilities in these countries, and thus general practitioners have a great deal of responsibility in addressing mental health issues. In consideration with these limitations, a beneficial approach could be to train primary healthcare workers at various levels with a possibility of them just being provided training to identify and refer patients to more specialist services. This could result in a lesser burden of responsibilities for primary healthcare workers, and more appropriate and effective care for patients. Pakistan, for instance has implemented this strategy as part of the mhGAP training to strengthen existing mental health services in the district of Bannu, shortly after the launch of a military operation in North Waziristan (Humayun et al, 2017). Training was provided for medical physicians as well as psychosocial staff in the affected district. The employment of this strategy in a conflict zone, not only improved MHL among health care workers at differing levels but also provided an understanding of the challenges faced by individuals in LMICs especially during times of crisis.

It should be noted that the rolling out of mhGAP programmes has not passed without criticism. Some of the limitations are summarised by Mills and Hilberg (2019) They point to the way that the WHO has attempted to garner support for the programme by using 'alarming statistics' depicting LMICs in a negative light. It has also been criticised as being strongly biomedical and overly focused on 'treating individual conditions', paving 'the way for further medicalisation of global mental health' (UN Human Rights Council 2017, p. 5). In a similar way to what we have outlined above concerns have been voiced that the mhGAP programme disregards '*ongoing debate about the cross-cultural validity of psychiatric diagnoses*' and suggests 'an overreliance on psychotropic medication' (White and Sashidharan 2014, p. 415). The programme constructs mental health as being largely a technical problem of delivering services (Applbaum 2015). The focus on evidence-based medicine tends to privilege treatment approaches that have been supported by large randomised controlled trials sponsored by the pharmaceutical industry. Consequently, approaches that are less well funded and based on grass-roots and community-driven activities that are less easy to evaluate with randomised controlled trials are likely to be overlooked (Kirmayer and Pedersen 2014).

Areas for Further Investigation

Conducting research on the problems surround MHL can be considered imperative in addressing the inequalities and disparities in mental health provision in LMICs. Despite the implementation of different interventions and strategies to enhance mental health literacy, several gaps have been left unaddressed within literature. An outline of the areas requiring further investigation are explained here:

- Longitudinal studies and interventions exploring the relationship between improved MHL and improved mental health outcomes is needed in LMICs. Studies encompassing the beliefs and values associated with their culture will allow for a more reliable and holistic assessment of the impact of MHL and its outcomes in these countries. Furthermore, such research can also allow us to

understand the effect of longitudinal versus short-term interventions on the MHL and long-term outcomes of individuals living in LMICs.

- Rather than a single preferred way of understanding mental health, it would be valuable to exploring the impact of cultural beliefs on the presentation and understanding of mental health-related symptomology is also needed in LMIC communities, as this may impact their levels of MHL which is assessed using western assessment methods. MHL screening instruments may not be appropriate for use in non-western settings such as LMICs and thus may need to be culturally adapted.
- MHL is a concept that has been founded in the West. Assessment of knowledge and beliefs in relation to mental health often focus on evidence-based identification manuals (e.g. Diagnostic Statistic Manual – DSM-5, APA ,2013) or treatments (CBT, psychotherapy), which may not be accessible or applicable to a LMIC population. Thus, there exists a need to question and address the usage of western and diagnostic treatment methods and thus the MHL of healthcare professionals in LMICs.
- In the UK, there exists huge disparities between the provision of mental health care and treatment outcomes among British and Minority Ethnic (BAME) groups. Numerous studies and interventions have been conducted to understand reasons for this disparity, with several reasons coming to the forefront including stigma, cultural beliefs, reluctance from family members and poor knowledge regarding mental illness. In addition, from the point of view of some minority ethnic communities, mental health care is often coercive and unhelpful. BAME groups are more likely to find their way into mental health care compulsorily via the justice system and experience harsher treatment and poorer outcomes (Bignall et al, 2019). The apparently low level of MHL in the UK's minority ethnic communities may well reflect justifiable concerns that mental health care is not in their best interests, as well as reflecting cultural factors among minority populations. Similarly, when exploring MHL among LMICs, it is also important to understand the MHL and the factors that impact help-seeking in these countries, as rather than ignorance, people's attitudes and beliefs may reflect legitimate misgivings about mental health provision and outcomes.
- As briefly highlighted in the introduction, several social determinants such as poverty and SES can be considered contributors to poor mental health. 'The Marmot Review' (Marmot et al, 2020) in England has highlighted similar health inequalities existent within the country. One area of particular interest when focusing upon mental health, is the role of postcode lottery in health inequity. The postcode lottery highlights the inequalities that exist as a result of where you live in England. If for example, an individual lives in a deprived area, they are more likely to experience poor health outcomes and as a result a shorter life expectancy. In LMICs, such disparities are prevalent in the context of mental

health. Understanding the MHL in areas where inequalities are prevalent can provide guidance for further action in reducing these disparities.

- Films are a great source of entertainment as well as a source of information. Among LMICs, the 'Bollywood' film industry in India can be considered one of the largest film industries. Consumption of film content is high. The role of films and media in addressing mental health issues and promoting MHL can be considered a useful mechanism in reducing stigma and enhancing beneficial perceptions, beliefs, and knowledge towards mental health. Similarly, social media platforms are used widely by individuals, groups and organisations across the world. Understanding the role of social media in MHL is also of importance in the development of strategies and interventions to improve MHL.

Conclusion

An increased amount of mental health problems and poor service usage among individuals in LMICs, indicates the need for mental health literacy. Poor mental health literacy can result in poor mental health outcomes resulting in higher disease and hence economic burden in LMICs where mental health facilities are already scarce. Studies with more comprehensive and inclusive measures of MHL should be conducted to clearly assess such associations. Individuals in LMICs face several challenges including illiteracy, poverty, poor mental health policies and a lack of infrastructure. Imbedding these factors within MHL strategies and interventions can be considered useful in not only improving the mental health of individuals from LMICs but also the MHL of policymakers. The incorporation of new forms of communication such as digital media, social media and films within MHL interventions should also be considered. Strategies to enhance MHL should be considered a priority in LMICs as a means to develop mental health promotion, increase the ability to recognise mental illness early, improve support and care systems, enhance the rights of mentally ill people and diminish stigmatisation attitudes towards mental health (Bal, 2016).

Cultural beliefs and knowledge have been cited as an important factor effecting help-seeking behaviour in LMICs. One approach may be to try to replace these with mental health literacy and mental health first aid (Altweck et al, 2015) as is exemplified by the mhGAP programmes, but at the same time it is important to be aware of the many misgivings that have been expressed about these activities. In the UK, it is reported that nearly 71 million prescriptions for depression are issued annually, considerably more than the UK population (Iaccobuci, 2019). Is this a direction that health leaders and policymakers in LMICs would want for their fellow citizens? It may instead be possible to conceive of programmes that build capacity, resilience, coping and compassion in synergy with local culture, without necessarily being preoccupied with western-style diagnosis and pharmacological intervention.

Perhaps the best prospect for a genuinely useful concept of mental health literacy is to consider how it may become more pluralistic. Rather than a focus on people's ability to spot symptoms or hold favourable attitudes toward conventional treatment, perhaps the focus should be on a more diverse array of mental health literacies. There may be a variety of ways in which peoples and cultures can be enabled to show kindness and compassion towards those who may be distressed or disoriented, gain the ability to have better-informed critical conversations about mental health, and incorporate the contribution of all stakeholders, including service users themselves. In this way, MHL can form a vital role in improving the mental health of the society.

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