

Mental health training of primary health care workers: case reports from Sri Lanka, Pakistan and Jordan

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Evidence suggests that providing support to primary health care with training, assistance and supervision by available mental health professionals is the best way to extend mental health care to the population. Three cases of mental health training programmes for primary health care workers were implemented in different countries, and are described in this article. The objective was to share the lessons learnt in different settings. Relevant primary and secondary data were used to present the cases. The mental health trainings generally improved the mental health knowledge of primary health care workers. More sustainable changes in their mental health care practices were achieved only as a result of several factors combined together: a) professionally designed and implemented mental health training; b) motivation by all key players to develop community mental health services; c) political will by the government followed by formulation of mental health policy promoting integration of mental health into primary care; d) good timing of the programme; and e) influx of funding and professional expertise. The findings of this article support the viewpoint of the World Health Organization that mental health training for primary health care workers is just one of the factors necessary for the successful integration of mental health care into primary health care.

Keywords: mental health, mental health care services, primary health care, programme development, staff development

Introduction

One of the 10 recommendations by World Health Organization (WHO) on how to

approach the problem of the existing shortage of mental health care professionals in many countries around the world, close the treatment gap and improve mental health care services, stresses the provision of management and treatment of mental disorders in primary health care (World Health Organization, 2001). The integration of mental health care into primary care is a fundamental process that enables the largest number of people to gain faster and easier access to mental health care services. It is also helpful in reducing the stigma attached to mental illness existing in many communities around the world (World Health Organization, 2008). The basic component of this process is the training of primary health care (PHC) workers in the recognition and management of a range of mental disorders (World Health Organization, 2001). Appropriate mental health training needs to be combined with continued supervision and support by mental health care professionals in order to achieve effective mental health care in primary care settings (World Health Organization, 2008). According to Saxena et al. (2007), training, assistance and supervision of primary health care services by available mental health care professionals is a necessary prerequisite for a successful integration process. It is also important to emphasise that, although mental health care investments in primary care are important, they are unlikely to be

sustained unless they are preceded and/or accompanied by the simultaneous development of community mental health care services (Saraceno et al., 2007).

Many studies have evaluated the effectiveness of mental health care training for various groups of beneficiaries (residents, general practitioners, nurses, etc.) in different countries. (Cohen, 2001; Harding et al., 1983; Hodges, Inch, & Silver, 2001; Hodgins et al., 2007; Kroenke et al., 2000; Lum, Kwok & Chong, 2008; World Health Organization, 2008). In general, a large majority of such training were successful in improving diagnostic accuracy (i.e. diagnostic specificity) and sensitivity of trainees, as well as their attitudes towards mental health issues, but was also found to be less successful in changing their actual clinical practices and patient outcomes, especially in the long-term (Kroenke et al., 2000, Cohen, 2001).

This article describes how opportunities, initially provided by relief efforts after the 2004 tsunami in Sri Lanka, the 2005 earthquake in Pakistan, and the 2003 war in Iraq, were used to deliver mental health care training for PHC workers in two districts of Sri Lanka, one district in Pakistan and the eastern part of the city of Amman, in Jordan. The objective of the paper was to assess the effectiveness of training interventions, and to share the lessons learnt in different settings. According to Saraceno et al. (2007), professional understanding of the effects of disasters, paired with post emergency mental health care interest (including media and politicians), can provide enormous opportunities for the development of mental health care systems. Mental health training programmes of primary health care workers in all targeted areas were implemented by the international nongovernmental organisation (INGO), International Medical Corps (IMC), in a

close collaboration with the Ministries of Health of the countries, WHO local representative offices, local psychiatric colleagues, PHC workers and local and provincial health authorities.

Context

In Sri Lanka, mental health care trainings of primary health care workers were conducted in two administrative areas called districts, both hit hard in the 2004 Tsunami natural disaster, which killed about 40,000 people in Sri Lanka, specifically the district of Kalmunai in the north-east of the country, with a population of 401,534 (Deputy Provincial Directorate of Health Services (DPDHS) Kalmunai, 2003), and the district of Hambantota in the South, with the estimated population of 525,370 people (World Health Organization, 2005). In Pakistan, mental health care training of PHC workers was conducted in the district of Mansehra, in the North-West Frontier Province (NWFP), with a population of 1,152,839 people (1998 census), that was hit hard by the 2005 earthquake that killed around 80,000 people in Pakistan. In Jordan, mental health training of PHC workers was conducted in Eastern Amman, which hosted many Iraqi refugees after the 2003 Iraqi war, with an estimated population of 149,775 people. In all targeted areas, except the Hambantota district in Sri Lanka, the population consisted of different ethnic groups; Tamils and Muslims in Kalmunai, Pashto and Urdu speaking populations in Mansehra, and Jordanian and Iraqi populations in Eastern Amman. All targeted areas were economically poor compared to the national standards of Sri Lanka, Pakistan and Jordan.

Mental health care services in targeted areas

Only two physicians, with the title of Medical Officers of Mental Health,

provided mental health care services, in both the Kalmunai and Hambantota districts in Sri Lanka. They were basically general practitioners with three-month additional postgraduate mental health training. Both districts had only visiting psychiatrists, who used to perform psychiatric consultations in the districts, once or twice a month. The district general hospitals had no separate wards and/or departments to treat mental health patients. Only two psychiatrists and one mental health hospital, in the town of Mansehra, provided mental health services in the Mansehra district in Pakistan. In Jordan, people from Eastern Amman had to seek mental health services either from private psychiatrists (with a fee charged for service), or from the (350 bed) public mental health hospital in Amman, with long waiting lists and a shortage of medications. It is also worth mentioning that at the time of this project, there were no psychiatric wards in Jordanian general hospitals.

Methods

First, secondary data from the relevant mental health literature were collected. Basic psychiatric epidemiological data and data on mental health resources for all three countries (Sri Lanka, Pakistan and Jordan) were obtained from the WHO Mental Health Atlas project (WHO, Department of Mental Health and Substance Abuse, 2005). Local mental health care studies, published in various national and international journals, were the additional source of information on mental health needs and services, as well as on specific mental health issues, (e.g. high suicide rates in Sri Lanka, high rate of depression in women in Pakistan, and the link between violence and mental health in Iraqi refugees in Jordan). The following literature was reviewed: Sri Lanka

(de Silva, 2002; Mendis, 2004; Eddleston, et al., 1998); Pakistan (Ahmer, et al., 2006; Husain, et al., 2007; Karim, et al., 2004; Mubbashar & Saeed, 2001; Mumford et al., 1996; Mumford et al., 1997; Mumford et al., 2000); and Jordan (Al-Haddad et al., 1999; Daradkeh et al., 2006; Takriti, 2004).

Primary data on mental health care needs and services were collected only in those areas of the targeted countries, where mental health training of primary health care workers was implemented. Both qualitative and quantitative data collection methods were used. Qualitative data collection methods included open ended, semi-structured key informant interviews, structured focus groups and unstructured participant observation. These were also used for field assessment purposes and focus groups were used for the evaluation of satisfaction with the training. Observation was used for the evaluation of the mental health skills of the PHC workers.

Quantitative data collection methods included 30-item multiple choice knowledge tests for PHC doctors, and 15-item multiple choice knowledge test for PHC mid-level workers. They were used to evaluate theoretical mental health care knowledge of participants, before, and after the training. The construct validity of all study instruments was determined by: a) the professional judgment of local and international experts; b) the available evidence on the use of similar instruments in similar situations; and c) general recommendations in the literature on questionnaire design (Fathala, 2004). An on-the-job training competency checklist (Table 1) was used immediately at the end of comprehensive training (theoretical and on-the-job), in order to evaluate practical skills of the PHC doctors, in regard to their detection rate, diagnostic accuracy and treatment of mental health problems in

Table 1. On-the-job training competency checklist

	Task or usage of skill	Demonstration of task or usage of skill		
		Good	Fair	Poor
1	Taking relevant history of patients presenting complaints			
2	Taking relevant medical history			
3	Taking relevant psychiatric history			
4	Demonstrating good communication skills with patient			
5	Making correct psychiatric diagnosis			
6	Taking appropriate decisions regarding medication and treatment			
7	If prescribing, give correct advice and information about medications			
8	Recording data correctly			
9	Providing clear instructions and explanations to patient about his/her problem			
10	Spending sufficient time with each patient			

general practice. The statistical index, Cronbach alfa, was used to measure the degree of internal consistency of knowledge tests (Wells & Wollack, 2003), and it was 0.84 (Cronbach's alpha is a coefficient of reliability, and is commonly used as a measure of the internal consistency or reliability of a test score, a Cronbach's alfa of at least 0.7 is required before the instrument could be considered reliable enough for testing).

The mental health training manuals used were developed for each training separately, and they included several core elements that should shape the development and implementation of training curricula (Wein et al., 2002):

- 1) competence in listening and other communication skills;
- 2) training in properly recognising mental health problems within a community;
- 3) teaching established mental health interventions;
- 4) providing strategies for problem solving;
- 5) training in the treatment of medically unexplained somatic pain; and
- 6) learning to collaborate with existing local resources, e.g. indigenous healers (practitioners of alternative medicine), who are often the first point of contact for mental health problems in many developing countries (Budosan & Aziz, 2009; Budosan et al., 2007).

Results

Sri Lanka (Kalmunai and Hambantota districts)

The analysis of qualitative data from the interviews with mental health professionals, and focus groups with the PHC doctors, identified several important issues. The majority of interviewed participants in both districts agreed on following: a) there was a significant gap between mental health needs and services; b) a significant number

of mental health care issues were dealt with through traditional healers; and c) improvement of availability, accessibility and affordability of mental health care services was considered as necessary to improve the overall mental health of the population. The observation of practices of the PHC workers identified a lack of skills in the recognition and treatment of mental health problems. The mental health training in Kalmunai was conducted from April to October 2005, and in Hambantota from August to January 2006. Both trainings were designed with local mental health care professionals and the PHC workers, and received institutional, ethical clearance from both local and governmental health authorities. Consent of the participants was obtained either through direct communication, or through the responsible health authorities. A combination of theoretical and practical (on-the-job) training was identified as the best model to deliver the training. Five 2-day workshops (held monthly), or 50 hours of comprehensive theoretical training, and (on average) 3.7 on-the job training sessions per participant, supervised by either local and/or international psychiatrists, were delivered to the PHC doctors in Kalmunai during a six month period. Seven 2-day workshops, or 70 hours of comprehensive theoretical training, and (on average) 7.7 on-the-job training sessions per participant were delivered to PHC doctors in Hambantota, also over a 6 month period. Twelve hours of intensive theoretical training were delivered to mid-level public PHC workers (mid-level staff involved in health promotion and prevention) during a 3 month period. Fifteen percent of primary health care doctors, and almost 100% of mid-level public PHC workers in Kalmunai, as well as 23% primary health care doctors and almost 100% mid-level public PHC staff in

Hambantota, received this training. The success of the theoretical part of the training was measured by the pre/post knowledge test, only in the Hambantota district (Table 2).

On-the-job training improved the practical skills of the PHC doctors, which were virtually nonexistent before the training intervention (Table 2). On average, 72% of the participants in Kalmunai, and 79% in Hambantota, expressed their satisfaction with different aspects of the delivered training (Budosan & Jones, 2009).

Pakistan (Mansehra district)

The gaps between mental health care needs and services, the stigma attached to mental health problems, the important role of traditional healing systems in dealing with mental health problems, and the need for a mental health training of PHC workers were identified as the most important issues in both the focus groups with the PHC workers, and in interviews with key informants (Budosan & Aziz, 2009). Both a lack of mental health care knowledge/skills by the PHC doctors, and poor involvement of the PHC mid-level workers in the management of mental health care problems, was observed during patient encounters. The mental health training in Mansehra was conducted from May to August 2006. Both local and district health authorities authorised this training, and when informed by district and local health authorities, the PHC workers gave their consent to participate. Twenty-five hours of comprehensive, theoretical mental health care training were delivered to Mansehra PHC doctors, and 18 hours to Mansehra PHC mid-level workers (named *Lady Health Visitors*), during a 3 month period. Sixteen half-day, weekly mental health care training sessions were delivered to nongovernmental organisation

(NGO) workers helping the earthquake-affected population. Seventy-one percent of the Mansehra government based primary health care doctors, and 50% of Mansehra government based PHC mid-level workers, received basic mental health care training, in order to begin to integrate mental health into their practices. There was no evaluation of the success of this training (which was only theoretical) by knowledge testing, but on average, more than 80% of training participants expressed satisfaction with the training (Table 2).

Jordan (eastern Amman)

The analysis of qualitative data from the interviews with mental health care professionals and focus groups with the PHC doctors, concluded that the provision of equitable, comprehensive and affordable mental health care services, a multi-disciplinary approach to mental health care, and community education on mental health issues were the best ways to improve mental health care. Observation of patient encounters in the PHC clinic run by the Jordanian Red Crescent in Eastern Amman revealed that the PHC workers did not have either the time or adequate knowledge/skills to properly address mental health issues within primary care. In Jordan, mental health care training of the PHC workers was conducted for 30 primary health care doctors, working for three local NGOs (Jordanian Red Crescent, Caritas and Jordanian Health Aid Society), helping Iraqi refugees and the poor population of Jordan. This training was conducted in the period from April to August 2008. The Ministry of Health in Jordan gave an ethical clearance for the training, and the PHC workers of three of the above mentioned NGOs agreed to participate. Twelve weekly sessions, or 60 hours of comprehensive theoretical mental health

Table 2. Results of mental health trainings in targeted areas

Country (area)	Mental health knowledge (percentage of correct answers)	Mental health skills (percentage of doctors with good usage of mental skills)	Satisfaction with training
Kalmunai district (Sri Lanka)	No data collected	Practically 0% before training 77% after the training	On average 72% satisfied with different aspects of training
Hambantota district (Sri Lanka)	Pre test 64% Post test 81% (medical doctors) ($t = 10.88, p < 0.05$) Pre test 54.6% Post test 66.6% (mid-level staff) ($t = 17.2, p < 0.05$)	Practically 0% before training 85% after training	On average 79% satisfied with different aspects of training
Manshra district (NWFP, Pakistan)	No data collected	No data collected	On average more than 80% satisfied with training
Eastern Amman (Jordan)	Pre test 55% Post test 80% (medical doctors) ($t = 11.77, p < 0.01$)	Data pending	Data pending

training, were delivered. The success of the training was evaluated with pre/post knowledge test (Table 2).

Discussion

The evaluation of training results clearly shows improvements of the theoretical mental health knowledge (Sri Lanka and Jordan), satisfaction of the great majority of participants with the training (Sri Lanka and Pakistan), and improved mental health care skills of the PHC doctors (Sri Lanka). In Sri Lanka, the mental health care training programme also improved the actual mental health clinical practices of the PHC workers, and served as a catalyst for the further development of community mental health care services, which are likely to be sustainable in the long term (Budosan & Jones, 2009). Until now, 13 outpatient mental health clinics, operated by trained PHC staff, from once a week to once a month, were opened in all health administrative areas of the Kalmunai district. Three PHC doctors, with one year postgraduate training in mental health, as well as a multi-disciplinary team consisting of psychiatric social worker, nurse and occupational therapist, were appointed to that district in the north east of Sri Lanka. Four new mental health clinics, operated by trained PHC staff, have now opened in Hambantota, during the mental health training period. The number of detected and properly diagnosed mental health patients, who also received treatment in primary health care, increased in all health administrative areas in both districts (Budosan & Jones, 2009). On-the-job training of the PHC doctors in Jordan finished only recently, so there are still no evaluation data on that part of the mental health training, or on the satisfaction with the Jordan training in general. So far, this training was successful in increasing

detection rates, diagnostic accuracy, and the number of referrals of mental health cases to psychiatrists. In 2008 and 2009, it also expanded to two more areas in Jordan (Dr. Jacob Joseph Panikulam, IMC Mental Health Coordinator, Jordan, personal communication).

However, the lack of political will, separate budget allocations for mental health care, the lack of a formulation of a mental health policy promoting integration of mental health care into primary care, and the lack of development of community mental health services remain obstacles to sustainable change in the mental health care practices of the PHC practitioners.

Although mental health care policy promoting integration of mental health into the primary care had been formulated in Pakistan in 1997, so far the major challenge in this country has been poor implementation of this policy by trained PHC workers. According to a personal communication from Prof. Dr. Saeed Farooq, psychiatrist from Lady Reading Hospital in Peshawar (2008), two years after the implemented training in Mansehra, trained PHC doctors were still only detecting and referring cases of severe mental disorders to psychiatrists, at the same time providing only minimal treatment for both common and severe mental health problems in their own practices. Lack of mental health research in Pakistan prevents making any definitive conclusions in regard to the longer term outcome of this training, and the integration of mental health into primary health care in general (Mubbashar & Saeed, 2001).

The strength of the mental health training programme in Sri Lanka, compared to training programmes in Pakistan and Jordan (so far), appears to be the result of several factors combined: a) the political will of the government of Sri Lanka (Ministry

of Health) to develop community mental health care services (Saraceno et al., 2007); b) the formulation of a Sri Lankan mental health care policy promoting the integration of mental health into primary health care (Democratic Socialist Republic of Sri Lanka, 2005); c) commitment of the PHC and mental health professionals to implement the policy; d) professionally designed mental health trainings, with both theoretical and on-the-job training components, in tune with the *IASC Guidelines* being developed at that time (Inter-Agency Standing Committee, 2007); e) good timing of the programme (right after a major disaster), which resulted in an influx of international funding and expertise; and f) cohesive work of all the major stakeholders (government, WHO, local health authorities, local and international mental health professionals and local PHC workers).

According to Hodges et al. (2001), all described here mental health care training programmes described here met three important requirements for the effectiveness of an educational intervention: 1) duration of the intervention (training interventions were ongoing longitudinal educational interventions); 2) the degree of active participation of the learners (training interventions were interactive, using participatory teaching methodology); and 3) the degree of integration of the new knowledge into the learner's clinical context (location of training interventions were held in pre-existing primary care settings). Mental health trainings also followed consensus based guidelines for international training in mental health care, as established by the task force of the International Society for Traumatic Stress Studies (Wein, 2002). During training, an open dialogue was promoted between trainers, training participants, and other key mental health players

(i.e. the Ministries of Health, local WHO representative offices, and other local and international organisations working on mental health issues). This approach helped to integrate different perspectives and attitudes on mental health within the countries. Training sessions were culturally sensitive, and appropriate for the context, which was especially important for on-the-job training involving mental health patients. The confidentiality of patients' data was of the utmost importance; data were shared only with health professionals directly involved in training. The patients' wishes as to whether to provide, or not to provide, certain information were respected.

Conclusion

Case reports on mental health trainings of the PHC workers in three different settings suggest that sustainable changes in their mental health care practices can be achieved only as a result of a several efforts combined (see the example of Sri Lanka above). Political will of the government, followed by formulation of mental health care policies in the country promoting the integration of mental health into primary care, influx of funding and professional expertise, motivation of the PHC workers and mental health care professionals to develop community mental health services, and professionally designed and implemented mental health care training of the PHC workers, including on-the-job training supervised by psychiatrists, are all important for the success of such an effort. However, the results presented in this paper cannot be considered as conclusive, because all the data from the mental health care training in Jordan are still not available. A future comprehensive evaluation of mental health training in Jordan is recommended to complement the results presented here.

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