Mental Health in Family Medicine 2012;9:33–8

Article

Impact of a one-week intensive 'training of trainers' workshop for community health workers in south-west Nigeria

Victor Makanjuola MBBS MSc FWACP
Consultant Psychiatrist, Department of Psychiatry, University College Hospital, Ibadan, Nigeria

Victor Doku MBChB MRCPsych MSc
Psychiatrist and Epidemiologist

Rachel Jenkins MB BChir MD (Cantab) FRCPsych
Director of WHO Collaborating Centre

Institute of Psychiatry, London, UK

Oye Gureje MBBS PhD DSc FRCPsych FRANZCP FMCPsych FWACP
Head, Department of Psychiatry, University College Hospital, Ibadan, Nigeria

ABSTRACT

Background There is a huge unmet need for mental health services in low- and middle-income countries such as Nigeria. It has been suggested that one way of bridging the service gap is to plan for the effective integration of mental health services into primary care. We present the impact of a one-week training workshop on attitudes to and knowledge of mental health issues among the tutors of community health workers.

Method An intensive one-week training workshop was organised for 24 trainers of community health officers from eight Nigerian states. The package was designed for the training of primary care workers in low-income countries by one of the authors (RJ). Participants completed a questionnaire designed to assess knowledge of and attitudes to mental health issues before and on completion of the training.

Results There were 24 participants with a mean age of 47 years (SD ± 4.89). Eighteen (75%) of the participants were female. The overall assessment of knowledge of mental health issues increased from a mean score of 60.4% before training to a mean score of 73.7% after the training (*t*-test = 4.48, $P = 0.001$).

Conclusion We reported a significant improvement in the knowledge and attitudes of tutors of community health workers following an intensive one-week training workshop. This, we believe, should improve the quality of pre-service mental health training for community health workers and hopefully impact on mental health service delivery at the primary healthcare level.

Keywords: community health workers, long-term impact, training of trainers

Background

Mental disorder is extremely common in all countries, in all parts of the world and no country, however rich, can afford enough specialists to look after everyone with a mental disorder. The high prevalence, severity, duration and accompanying disability of mental health problems at the primary care level have major implications for the delivery of services to meet population needs, and it has been

widely recognised since Alma Ata (1979) that it is essential to integrate mental health into primary care in all countries.[1] This is true for rich countries, and even more so for low- and middle-income countries where specialist services are much more scarce.[2–4] Whereas rich countries often have around one psychiatrist per 10 000 population, low-income countries in sub-Saharan Africa have, on average, one psychiatrist per million population, and in practice such a ratio is much worse outside the large cities where psychiatrists tend to be based.[5] A 'brain drain' of specialists to richer countries has compounded the difficulties of low-income countries trying to develop their health systems.[6]

However, despite the long-standing intent to integrate mental health into primary care, and early significant efforts to implement and evaluate such integration, these efforts have not been well sustained in many countries, and there remains a worldwide treatment gap for mental health conditions.[7] This is even more severe in low- and middle-income countries such as Nigeria. For example, a recent report from Nigeria suggests that only about 10% of people with current mental disorders had received any form of treatment and that fewer than 1% of those had received what could be considered as minimally adequate treatment.[8]

Thus there have been renewed calls from the World Health Organization (WHO) and others to integrate mental health into primary care by the effective training and support of primary care providers in the identification and treatment of mental health problems.[9–12] Indeed, the integration of mental health into primary healthcare services has had official policy backing in Nigeria since 1991.[13] However, the reality is that, to date, little or no mental health care has been offered in primary care settings in Nigeria. A major reason for this discordance between policy intention and real life is the lack of adequate training for primary care providers in the country.[14]

In Nigeria, primary care clinics are staffed by community health officers who have two years of training in basic health issues, but limited training in mental health. Their basic training is delivered in health technology colleges by tutors who are mostly registered nurses and midwives who have had three years of training in tutors training institutions.

We organised a one-week mental health training workshop for teachers from selected institutions for the training of primary care providers in Nigeria, in order to train them in the use of a structured package of mental health training materials which they could then adapt and use in their own training courses for trainee primary care providers. This paper describes the conduct of the training of trainers workshop and assesses its immediate impact on the knowledge and attitudes of the trainers. A second paper will assess the longer term impact of the training on the training behaviour of the trainers.

Methodology

An intensive one-week training workshop was organised for 24 college trainers of community health officers selected from 13 training colleges in eight Nigerian states. Six of these states are in the south-west and two are in the north-central region of the country (predominantly Yoruba-speaking states). The participants were identified as mental health tutors and invited for the training by the National Primary Health Care Development Agency (NPHCDA). NPHCDA co-ordinates the deployment of community health officers and promotes best practices in service delivery nationwide. A representative from NPHCDA and one from the Community Health Practitioners Registration Board (CHPRB) were also part of the training. CHPRB develops the curriculum for training and regulates the practice of community health officers, including the licensing of practitioners.

The training package was originally designed by one of the authors (RJ) for the training of primary care workers in low- and middle-income countries and, to date, has been used to train primary healthcare workers in Kenya, Ghana, Malawi, Sri Lanka, Oman, Iraq and Pakistan.[15–17] The package is highly structured into five overall units. The first focuses on core concepts (mental health and mental disorders, and their contribution to physical health, economic and social outcomes). The second addresses core skills such as communication, assessment, mental state examination, diagnosis, management, managing difficult cases, management of violence and breaking bad news. Common neurological disorders including epilepsy are covered in the third unit, while the fourth unit covers psychiatric disorders. The content of the fourth unit is based on the WHO primary care guidelines for mental health. The fifth unit addresses health and other sector issues of policy, legislation, links between mental health and child health, reproductive health, HIV and malaria, roles and responsibilities, health management information systems, working with community health workers and with traditional healers, and the integration of mental health into annual operational plans.[16]

Each unit is subdivided into a series of 30-minute modules delivered over 5 days. Each 30-minute module generally consists of theory, discussion and role-play. Thus, by the end of the course, each participant will have taken part in over 25 supervised role-plays

in which specific competencies and skills are rehearsed and discussed. In addition, there is small group work and World Psychiatric Association's (WPA) videos on depression, psychosis and somatisation are also shown to demonstrate good clinical practice.

Participants completed a modified version of the questionnaire originally designed for use in the Kenyan training to assess the knowledge of and attitude to mental health issues before and at the completion of the training. The questionnaires were completed anonymously and in strict confidence. The responses were analysed using the SPSS statistical package. The participants' mean scores before and after the training were compared using a *t*-test, and differences in the proportion endorsing specific attitudes before and after training were compared using a *Z*-test. The level of significance was set at 0.05.

Results

There were 24 participants with a mean age of 47 years (SD ± 4.89). Eighteen (75%) of the participants were female. Table 1 shows the other demographic details of the participants.

The overall assessment of knowledge of mental health issues addressed by the questionnaire increased from a mean score of 60.4% before training to a mean score of 73.7% after training (*t*-test = 4.48, $P = 0.001$). Table 2 shows the changes in the proportion of those who believed that the statements examining beliefs and attitudes were true before and after the training. Prior to the training, 20.8% of the participants believed that mental health problems were too difficult for community health workers to deal with; this proportion reduced to 5% after the training. Before the training, prayer was considered to be the answer in most mental health crises by 29.2% of participants. The proportion holding this view reduced to 9% after the training. The number of participants who believed that, in general, people with mental illness were dangerous reduced by about 20% during the workshop from 58.3% prior to the training to 36.4% afterwards. Concerning suicide, 29.2% of the participants believed that people who say they are going to kill themselves never do it. This number fell to 4.5% after the training. A modest reduction of about 7% was observed in the proportion of participants who believed that people with mental health problems very rarely make a full recovery; a view initially held by 20.8%. Prior to the training, the opinion that depressed women are less likely to use antenatal and postnatal care was divided equally among the participants; at the end of the training, 90% agreed with this statement.

Discussion

This study demonstrated the potential value of training the teachers of mental health courses in

Table 1 The sociodemographic properties of the participants

Variable	*n* (*n* = 24)	Percentage
Gender		
Male	6	25
Female	18	75
Institution		
School/College of Health Technology	15	62.5
CHO training school in a teaching hospital	7	29.1
NPHCDA	1	4.2
CHPRB	1	4.2
Highest academic/professional qualification		
CHO Tutor's Certificate	11	45.8
Registered nurse (RN)	7	29.2
Bachelor of Science (BSc)	2	8.3
Master of Science (MSc)	4	16.7

CHO, community health officer

Table 2 Differences in participants' attitudes to mental health issues before and after training

Items	Pre-test (%)		Post-test (%)		*Z*	*P* value
	True	False	True	False		
Someone who complains of malaria-type symptoms, but who has normal blood film and no fever, may have depression	70.8	29.2	95.5	4.5	1.8	0.03*
Mental health problems do not occur in children	8.7	91.3	0.0	100	0.8	0.22
Depression and anxiety are rare in people who attend health centres	18.2	81.8	21.7	78.3	0.1	0.45
People who say they are going to kill themselves never do it	29.2	70.8	4.5	95.5	1.8	0.03*
All people with mental disorders should be treated by a specialist	62.5	37.5	31.5	68.2	1.8	0.03*
Depressed women are less likely to use antenatal and postnatal care	50	50	90.9	9.1	2.7	0.003*
People with mental health problems very rarely make a full recovery	20.8	79.2	13.6	86.4	0.2	0.40
It is impossible to help people with mental health problems that refuse to make a full recovery	12.5	87.5	18.2	81.8	0.2	0.40*
Families are often to blame for the patient's mental health difficulties	41.7	58.3	27.3	72.7	0.7	0.25
Prayer is the answer in most mental health crises	29.2	70.8	9.1	90.9	1.3	0.09
In general, people with mental illness are dangerous	58.3	41.7	6.4	63.6	1.2	0.12
Physically unwell children often have depressed mothers	41.7	58.3	77.3	22.7	2.2	0.01*
Mental health problems are too difficult for community health workers to deal with	20.8	79.2	4.5	95.5	1.1	0.13

*Significant at $\alpha = 0.05$

community health workers training institutions. In addition to the acquisition of knowledge, positive attitudes towards mental disorders and those with mental illness, which are essential for efficient service delivery, may also be developed. We have demonstrated a statistically significant improvement in the knowledge of teachers of mental health courses in community health workers' training institutions. Similarly, several negative attitudes previously held by the group improved after training. This outcome is in keeping with previous reports which examined changes in the knowledge and attitude of primary healthcare workers and primary care physicians after short-term training.[16–20] The Kenyan training reported a mean increase in knowledge score from 44 to 77% for the first 1000 primary care trainees.[16] It should be noted that the baseline score obtained in Kenya before receiving the train-

ing in this group was much lower than our baseline of 60.4%, but this is to be expected as the cohort trained in this Nigerian study were the college tutors of primary care workers, rather than primary care workers themselves. In a WHO collaborative study, Ignacio *et al*[21] reported significant improvements in the knowledge and attitudes of general health workers in six developing countries following training.[21] This improvement in knowledge and attitude was shown to persist 18 months post training.

Some negative attitudes are deeply ingrained and may require longer term interventions to reverse them. The belief that people with mental illness cannot recover completely from the illness was not appreciably affected by the training. Such culturally ingrained beliefs and the attendant prejudicial attitude towards people with mental illness and their relatives may require longer term exposure to managing people with mental illness for improvements in attitude to occur. Chinnayya *et al* reported no change from baseline scores in 10 of their 35 items addressing attitude towards mental health following a short-term training intervention, despite a significant change in knowledge.[19]

In order to thoroughly embed mental health knowledge and skills within primary care, it is essential to integrate mental health into the basic training of staff, post basic training and continuing professional development, and to also embed it in the training of staff whose task it is to support and supervise primary care. This paper has described an exercise to address one aspect of this task, namely to train the college staff who deliver basic training to primary care workers, with the hope that they will use these training materials and their own gains in knowledge and attitudes and transfer them to their students who are to staff the primary healthcare centres in the near future.

Primary health care, by design, is expected to be comprehensive, being the first point of contact with the healthcare system for every healthcare need, including mental health care. However, this ideal has not been attained to a large degree in developing countries such as Nigeria. Our effort is targeted at improving mental health services at the primary care level. This we believe will improve overall service delivery at this portal of health care as it is now a widely known fact that there is 'no health without mental health'. The intricate relationship between mental and physical health makes improving general healthcare service delivery an unattainable goal without adequate attention to mental health at every level of health care.[22]

An important limitation of our study is that the changes reported in this paper were assessed immediately following the training. It is unclear whether both the acquisition of knowledge and change in attitude will endure for much longer periods following training. Also, even though questionnaires were completed confidentially, these changes were obtained by self-report and may have been influenced by a need to please the resource persons rather than the participants' true conviction. This study has not assessed whether the skills acquired by the tutors will impact on the primary care trainees, or on their eventual clients. These aspects are being evaluated in cluster randomised controlled trials in Kenya and Malawi (due to report shortly) and impact on physician behaviour in the clinic setting has been evaluated in a randomised controlled trial in Iraq.[17]

Conclusion

The intensive one-week training course significantly enhanced the knowledge and attitude of tutors of community health workers, and therefore has the potential to enhance the knowledge base and attitudes of other college lecturers responsible for training primary care staff in regard to mental health issues. The change in attitudes may be as important as the acquisition of knowledge to the effectiveness of these teachers in the delivery of mental health course. However, a short-term training may not be sufficient to change some deeply ingrained attitudes, and it remains to be seen whether the changes are maintained over a long period, and whether the college lecturers made extensive use of the training materials in the courses they subsequently delivered in their colleges. If the college lecturers do make use of these training materials, this may positively impact on mental health service delivery in primary healthcare centres within the catchment area of the intervention in Nigeria over the longer term.

ACKNOWLEDGEMENTS

We gratefully acknowledge the support of the World Psychiatric Association in providing funds for the organisation of the training workshop.

REFERENCES

1 World Health Organization. Report of the International Conference on Primary Health Care, Alma Ata, USSR. Geneva: WHO, 1979.
2 Shepherd M. *Psychiatric Illness in General Practice*. London: Oxford University Press, 1967.
3 Shepherd M. Mental health as an integrant of primary medical care. *Journal of the Royal College of General Practitioners* 1980;30:657–64.

4 WHO/WONCA. *Integrating Mental Health into Primary Care: a global perspective*. A joint report of the World Health Organization (WHO) and World Organization of Family Doctors (WONCA), 2008.
5 World Health Organization. *Mental Health Atlas*. Geneva: WHO, 2005.
6 Jenkins R, Kydd R, Mullen P *et al*. International migration of doctors, and its impact on availability of psychiatrists in low and middle income countries. *PLoS One* 2010;5(2):e9049.
7 Kohn R, Saxena S, Levav I *et al*. The treatment gap in mental health care. *Bulletin of the World Health Organization* 2004;82:858–66.
8 Gureje O, Lasebikan VO, Kola L *et al*. Lifetime and 12-month prevalence of mental disorders in the Nigerian Survey of Mental Health and Well-Being. *British Journal of Psychiatry* 2006;188:467–71.
9 World Health Organization. *World Health Report. No Health Without Mental Health*. Geneva: WHO, 2001.
10 Jablensky A, Johnson R, Bunney W *et al*. *Neurological, Psychiatric and Developmental Disorders – Meeting the Challenge in the Developing World*. Washington, DC: Institute of Medicine, 2001.
11 Jenkins R, McCulloch A, Friedli L and Parker C. *Developing Mental Health Policy. Maudsley Monograph 43*. Hove: Psychology Press, 2002.
12 *Lancet* Global Mental Health Group. Scale-up services for mental disorders: a call for action. *The Lancet* 2007;370 (9594):1241–52.
13 Federal Ministry of Health. *The National Mental Health Programme and Action Plan*. Abuja, Nigeria; Federal Ministry of Health, 1991.
14 Omigbodun OO (2001) A cost-effective model for increasing access to mental health care at the primary care level in Nigeria. *Journal of Mental Health Policy and Economics* 2001;4:133–9.
15 Jenkins R, Kiima D, Okonji M *et al*. Integration of mental health into primary care and community health working in Kenya: context, rationale, coverage and sustainability. *Mental Health in Family Medicine* 2010;7(1):37–47.
16 Jenkins R, Kiima D, Njenga F *et al*. Integration of mental health into primary care in Kenya. *World Psychiatry* 2010;9:118–20.
17 Sadiq S, Abdul Rahman S and Bradley M. Integrating mental health into primary care in Iraq. *Mental Health in Family Medicine* 2011;8:39–49.
18 Mansouri N, Gharaee B, Shariat SV *et al*. The change in attitude and knowledge of health care personnel and general population following trainings provided during integration of mental health in primary health care in Iran: a systematic review. *International Journal of Mental Health Systems* 2009; 3(1):15.
19 Chinnayya H, Chandrashekar C, Moily S *et al*. Training primary care health workers in mental health care: evaluation of attitudes towards mental illness before and after training. *International Journal of Social Psychiatry* 1990;36:300–7.
20 Naseem AQ, Van Der Molen HT, Schmidt HG *et al*. Effectiveness of a training programme for primary care physicians directed at the enhancement of their psychiatric knowledge in Saudi Arabia. *Education for Health* 2006;19(1):52–60.
21 Ignacio L, De Arango MV, Baltazar J *et al*. Knowledge and attitudes of primary health care personnel concerning mental health problems in developing countries: a follow-up study. *International Journal of Epidemiology* 1989;18:669–73.
22 Prince M, Patel V, Saxena S *et al*. No health without mental health. *The Lancet* 2007;370 (9590):859–77.

CONFLICTS OF INTEREST

None.

ADDRESS FOR CORRESPONDENCE

Victor Makanjuola, Department of Psychiatry, University College Hospital, Ibadan, Nigeria; email: vmakanjuola@yahoo.com

Accepted February 2012