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Monitoring and evaluation of the activities of trainees in the ‘training of trainers’ workshop at Ibadan, south-west Nigeria

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ABSTRACT

Background Like most low- and middle-income countries, Nigeria has a huge treatment gap for mental disorders. The World Health Organization has proposed the integration of mental health care into primary health service delivery as one of the ways to bridge this treatment gap. Studies have shown an immediate positive impact of mental health training for primary care workers. We evaluated the impact of training on the tutors of primary care workers approximately 12 months after the training.

Method An intensive five-day training workshop for college teachers of mental health in community health officer (CHO) training institutions in south-west Nigeria was conducted in January 2009. Four of the 24 participants were randomly selected for evaluation of the impact of training on their activities approximately 12 months after the workshop. Qualitative methods were used,

namely in-depth interviews, direct observation of classroom teaching by the participants and focus group discussion with their students.

Results The participants interviewed reported a positive impact of the ‘training of trainers’ (TOT) workshop on their mental health course teaching. Direct observation of four participants revealed that three of them exhibited a high fidelity with the TOT course material and imbibed the teaching techniques advocated. The tutors’ students also reported an improvement in the quality of their mental health classes.

Conclusion The training had an overall positive impact on the activities of the trainees approximately one year after the workshop.

Keywords: community health workers, mental health training, positive impact

Introduction

Like most low- and middle-income countries, Nigeria has a huge treatment gap for mental disorders. Although unmet treatment needs for mental disorders are a global phenomenon, this gap is more

pronounced in developing countries. An estimated 30% of the world’s population will suffer from mental disorders at some point in their lifetime, and only about two thirds of these will receive any

form of treatment.¹ The situation is even worse in a country such as Nigeria, with only about one in ten people with a mental disorder currently receiving any form of treatment.²

The integration of mental health into primary care has been a long-standing aim of the World Health Organization (WHO), but implementation has been slow and patchy, resulting in renewed calls to bridge this treatment gap through the provision of mental health services by non-mental health professionals at the primary healthcare level.³⁻⁶ In fact, provision of mental health services as part of integrated health services provision at the primary healthcare level was a major component of Nigerian National Mental Health Policy.⁷ However, the reality is that, 20 years on, no mental health service is being provided in most primary healthcare centres. One of the reasons for this is the limited training in mental health received by service providers at the primary healthcare level.^{8,9}

To address this glaring problem, in January 2009, the World Psychiatric Association (WPA) sponsored a five-day training workshop for teachers of mental health in community health officer (CHO) training institutions in south-west Nigeria, employing the 'training of trainers' (TOT) educational model.

As an educational model, TOT is characterised by an organising institution with requisite expertise conducting the training of individuals (trainers) with ties to the community for whom the knowledge is intended. The trainers are taught such that there will be minimal variability in the way they pass on the knowledge. This is often achieved through the use of instruction manuals and specific guidelines.

The strength of TOT lies in its cost-effectiveness because only the initial phase of the programme relies on the resources of the training institution. These usually ensure sustainability while widely distributing knowledge of the topic. Another benefit associated with this educational model is that knowledge is offered by trainers who are trusted and respected within their community, making its acceptance more likely.¹⁰ The same reason is also alluded to in explaining how TOT promotes self-reliance and empowerment of the community.¹¹

Critics of the model argue, however, that dilution of the training content is inevitable with the presence of a layer of trainers between the institution and the community. However, some workers have shown that this is not always the case.¹² Hinds *et al* go further and suggest that non-expert trainers may actually be better at transferring knowledge than experts.¹³ Another major criticism of the TOT model is the poor fidelity of implementation, with trainers who often fail to go on to conduct training in their community.¹⁴ In this paper, we report the impact of

the training on the activities of the trainees one year after the workshop.

Method

Twenty-four college lecturers were selected as key trainers of primary care staff in eight Nigerian states, and were trained during a one-week (five-day) workshop held at the University of Ibadan Conference Centre, Ibadan from 26 to 30 January 2009, with the aim of providing the participants with:

- knowledge, skills and competencies around mental health and mental disorders, as well as common neurological disorders, and their contribution to physical health, economic and social outcomes
- understanding of the linkages between mental health and child health, reproductive health, malaria and HIV
- understanding of the general policy and implementation contexts for primary care
- skills for working with the community and supporting volunteer community health workers.

The National Primary Health Care Development Agency (NPHCDA), the body that co-ordinates the deployment of CHOs, identified tutors of mental health in institutions training primary healthcare workers in the selected states and invited them to participate in the training. NPHCDA also promotes best practices in service delivery in primary care across the country. A representative from NPHCDA and one from the Community Health Practitioners Registration Board (CHPRB) also attended the training. CHPRB develops the curriculum for training primary healthcare workers as well as the licensing of practitioners.

The training package for the training of primary care workers in low-income countries was designed by one of the authors (RJ) and had previously been used to train primary healthcare workers in Kenya, Ghana, Malawi and Pakistan.^{15,16} The package emphasises the close relationship between mental and physical health and social issues in general practice, including the relevance of mental health to attainment of the Millennium Development Goals. Training incorporated role-plays, discussions, group work and WPA video shows in addition to didactic lectures.

It was agreed that there would be periodic monitoring, evaluation and boosting of the knowledge acquired during our workshop, through scheduled visits to the participants in their respective training institutions to observe them teaching their students using the skills acquired during the training. There-

fore, workshop participants, the selected college lecturers, were asked to forward the academic timetable of their institutions, indicating when mental health courses would be taught in order to facilitate monitoring and support visits by OG and his team in Ibadan.

From the eight states that took part in the training, four were randomly selected and monitoring was conducted approximately one year later after the training. This was our first face-to-face contact with the participants following the training; online contact through an internet group and phone calls had been made in the course of the year. From the tutors who had attended the workshop, four were chosen at random to be the subjects of the follow-up study.

Parameters for the evaluation

We employed qualitative methods to evaluate the impact of the TOT workshop. Subjective assessment of the effectiveness of the training was done through in-depth interviews and by observation of actual teaching. Focus group discussions were also held with selected students of the tutors.

In-depth interview of three key informants

Interviews were held with three of the selected participants; the fourth was excluded because he had not attended the training, although the materials and technique had subsequently been passed on to him by those who had. The three participants were asked if they had found the training useful in the teaching of mental health to the students. Challenges to the utilisation of the knowledge and skills acquired during the training were also explored.

Observing some of the participants deliver lectures in mental health to their students

Lectures were assessed based on the following criteria: interactivity; appropriate deployment of teaching techniques (use of examples, case vignettes, role-plays and group discussions); and content (incorporation of materials from the training).

Focus group discussions with the students taught by two of the participants

Two focus group discussions (FGDs) were held with the students. Participants in the FGD in Lagos are students undergoing training as CHOs, having spent

a minimum of five years as community health extension workers (CHEWs), while the Osun state group are training to become CHEWs. There were eight participants per group, with each group comprising five females and three males, reflecting the higher ratio of females to males in both institutions. Furthermore, to capture a diverse array of opinions, participants were selected based on age, ethnicity and religion.

The purpose of the focus group discussion was explained to the students, and verbal consent to participate was then obtained. The sessions were conducted in the absence of the college tutors and the participants were assured of the confidentiality of their responses. The sessions were recorded on audio cassettes with the aid of a portable recorder and then transcribed before analysis of the content. Discussions were held over a period of about 90 minutes in Lagos and Osun. The purpose of the discussions was to interact with the students in the absence of their teachers to indirectly assess their knowledge base (a possible reflection of the quality of training being received), to enquire of their perception of the quality of their training, to explore the impact of their training on their attitude towards the willingness to treat people with mental illness, and finally to ask for their suggestions on how their training with regards to mental health could be improved.

Results

In-depth interview of key informants

Two of the three informants were females and all the informants had over 10 years' experience of teaching primary healthcare workers.

They were unanimous in rating the quality of the training they received during the TOT as being very high. One of the participants commented:

'even though I have been teaching mental health courses for several years, I received a lot of new information during the training which I have been putting into practice.'

Another participant felt:

'the trainers made the importance of good mental health to overall physical well-being very clear; this has positively affected my attitude towards treating mental illness.'

Participants were asked whether the knowledge and skills acquired had been put into practice. The interviewees responded in the affirmative; supporting their responses by sharing their experiences:

'I always end my lectures on new topics by asking the students to formulate a role-play to assess their understanding of the topic.'

Another respondent reported that:

'my mental health class has been more interesting to the students with the addition of role-plays and group discussions; I use the techniques even in other classes I take apart from mental health.'

Practising the skills and knowledge acquired was not without challenges for the key informants. They identified time constraints as a major factor affecting their dissemination of the knowledge acquired. The time allotted to mental health in the curriculum was reported as being too short for effective coverage of the topics taught during the training. One of the respondents expressed her frustration:

'in the whole three-year course, you cannot even cover half of what we were taught during the training.'

This apparent limitation to exercising their teaching skills also was the focus of suggestions and recommendations for improvement of the status quo with regards mental health service delivery at the primary healthcare level:

'I will appeal to you [the interviewer] and the big Profs to influence the board [Community Health Practitioners Board] to review the mental health section of the curriculum and increase the time allotted to it.'

In addition, the key informants also felt that the success of this initiative can only be sustained if booster training workshops are organised.

'We [mental health teachers] need to be coming together may be once every year for a few days to refresh our knowledge by experts so that we don't teach outdated methods of diagnosis and treatment.'

Observing some of the participants deliver lectures in mental health to their students

Participants were observed while delivering lectures to community health workers and their performance on several measures was assessed (Figure 1).

Kwara (Ilorin)

A visit was conducted on 27 November 2009. The CHO training school is located within the premises of the University Teaching Hospital, Ilorin. Two teachers from the institution attended the TOT workshop in Ibadan; however, one is now retired. The teacher still in service imparted her skills to a younger colleague who usually sits in during her lectures in mental health. There were 35 students in the class who were in the second year of the two-year programme. The tutor was observed delivering a lecture on mild to moderate mental disorders: depression. The lecture was quite interactive and engaging, with copious use of appropriate examples and active participation of the students. There was a demonstration of previously learnt role-play on counselling the relations of a patient with mental illness. The session ended with a question-and-answer session.

Oyo (Ibadan)

The visit was conducted on 3 December 2009. Only one of the two participants who attended the TOT workshop was actively involved in teaching mental health in the state's health workers' training institution. He teaches a variety of health workers. This includes nursing students, public health nursing students (post basic training) and CHEWs. Overall, more than 200 students are exposed to his teaching annually. He has been the sole mental health

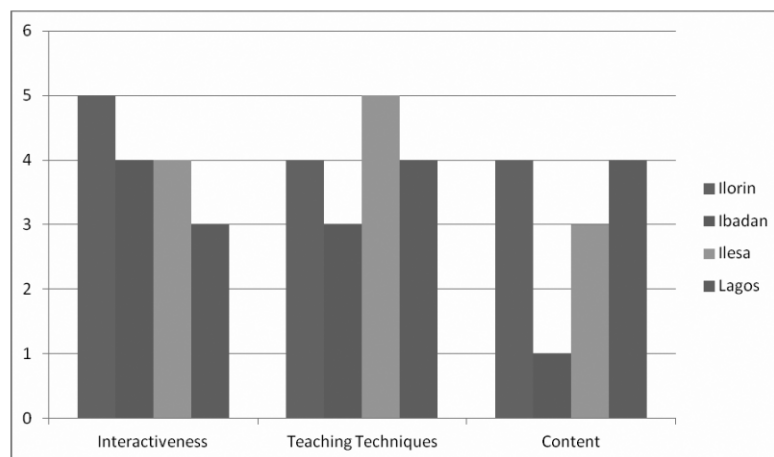


Figure 1 Performance of the tutors assessed during teaching classes

teacher in the service of the state for over 20 years and is actually involved in alternative mental health practice (traditional medicine).

He was observed delivering lectures on two occasions. His lectures were quite interactive and engaging. However, he made little or no use of the materials and skills imparted during the TOT. There was no use of role-plays, while examples and case vignettes are often deployed inappropriately.

Osun (Ilesa)

The visit was conducted on 18 December 2009. The participants work in a health technology college. The institution trains CHEWs, CHOs, village health extension workers and community health inspectors. The tutor was observed delivering a lecture entitled 'Mental health: promotion of positive mental habit' in a community health extension workers class. There were approximately 40 students ranging in age from early 20s to early 40s. At the time of the visit, the two TOT participants had been promoted to higher responsibilities. However, they had succeeded in training a younger colleague to whom they passed the materials from the training.

The lecture was interactive and engaging. Students participated actively in the learning process. It was evident that the lecturer was quite familiar with the content of the training manual. There was an appropriate use of examples and a demonstration of role-play on the counselling of a depressed patient was observed.

Lagos

The visit was conducted on 28 January 2010. The facility is a model primary healthcare centre and training institution of Lagos University Teaching Hospital. It is located in Patoko village, a rural area of the adjacent state, Ogun. The institution trains all cadres of primary healthcare workers. A lecture delivered to a class of CHOs was observed. The majority of the class were above 35 years old, because the prerequisite for attending the course is a minimum of five years' experience of working in the field as a CHEW.

The lecture observed was titled 'Managing mental disorders: depression and anxiety'. There was participation of the students and the appropriate use of case vignettes. Although no role-play demonstration took place during the lecture, the students reported the use of role-plays as a regular feature of their learning process. There was evidence of the incorporation of knowledge acquired during the training.

Focus group discussions with the students taught by some of the participants

The discussion started by exploring the students' understanding of what mental health is and the contributions revealed good understanding of the concept, as exemplified by the input from one of the participants:

'A mentally healthy person is a person that is able to adapt and cope with the environment.'

Another participant described a mentally healthy person as:

'I think is somebody who is able to manage his/her daily activities well, contribute to the environment and the people around positively without imposing stress or danger to the environment. He should be able to socialise well with the people and then manage his or her affairs.'

Similarly, what constitutes a mental disorder/illness was well understood by the students. One of the students described mental illness as:

'simply means the opposite of mental health, which is the inability of an individual to be able to cope, adapt and adjust himself to various factors around his environment.'

The two groups rated their current training in mental health as being of a very high quality. The CHO group, who have had prior training in mental health during their earlier training as CHEWs, were in a position to compare what used to be with current training:

'Well in the olden days, when we did our own school of health, they just grouped most of the mental health together to just teach us. So there were no specification as it is been done now.'

The CHO group identified as an improvement over their previous training the acquisition of skills to identify specific mental disorders and the ability to initiate treatment and refer when necessary. This is in contrast to the previous teaching and practice of referring all mentally ill patients. The new experience is summed up by one of the respondents as follows:

'I will say there is a lot of difference from how we were being treated here, here we are given manuals number 2 and 3 and then an electronic one to go through, and group work and then role-play, our lecturer has more knowledge on the topic, she was versatile trying to get us [to] know more about identification, signs and symptoms, management and then refer.'

The teaching techniques acquired at the TOT also received positive appraisal from the students. There was a universal endorsement of role-plays and

groupwork as being very useful teaching techniques. Although role-plays are now universally employed in the CHEW training programme, the CHO group found it a novel and interesting way to learn new information:

'When the role-play is on you imagine yourself interacting with the mentally ill person ... it is practical.'

Another participant remarked concerning role-plays:

'It is very useful because in an exam, one may not remember what is in the notes but you can always remember the drama and get the right answers.'

The two groups were unanimous in their suggestions for improving their training. They requested that a significant period of their training include exposure to real-life experience with patients being managed in psychiatric hospitals or community mental health centres. While all the participants agreed that they are better equipped to commence treatment of the mental illness in their community health centres, they were also quick to identify potential limitations or impediments to their activities. This includes being promoted to supervisory non-clinical duties after the CHO training; they also envisage some resistance from colleagues who have not received similar training when they begin to treat people with mental illness in the health centres; they opined that their authority to prescribe psychotropic drugs is going to be challenged, while the drugs are unlikely to be available in rural areas, thus making initiation of treatment requiring medications unlikely. The absence of a mental health programme with a programme coordinator at the local government level, as found for other components of primary health care, is seen as major limitation to the promotion and provision of a mental health service at the primary care level.

Discussion

Overall, the training had a positive impact on the activities of the participants about one year after the training. Three of the four trainees observed while teaching made appropriate use of the training materials while also deploying teaching skills imparted during the workshop. There are several reports of improvements in the trainees' knowledge and attitude towards mental health immediately post training using quantitative measures (pre and post questionnaires).¹⁵⁻¹⁸ A similar post-training improvement in knowledge and attitude was observed in this

cohort of participants (reported elsewhere).¹⁹ Fewer studies have looked at the persistence of such immediate gains beyond six months after the training. Ignacio *et al* reported sustained improvement in the knowledge and attitude of primary care workers following a WHO co-ordinated training of primary care workers in four developing countries, 18 months after the training.²⁰ In addition to looking at the knowledge and attitude of participants approximately 12 months after the training, we monitored and evaluated application of the knowledge gained during the training using qualitative methods.

The focus group discussion highlighted issues beyond the knowledge and attitude of the participants and that of their students which may impede the effective integration of mental health services into primary health care. These range from policy and administrative issues at the level of local government, which oversees primary health care, to the need for revision of the mental health section of the training curriculum by the regulatory body for primary healthcare practitioners.

Employing a TOT model enabled us to reach a wider audience of potential and currently practising primary healthcare workers despite only limited resources. This is a major strength of this educational model.¹⁰ Furthermore, receiving current evidence-based instructions on mental health from their regular tutors by primary healthcare workers has the potential to demystify a subject often associated with magico-religious attributions of causation.

To some extent, our experience also validates some of the criticism of the TOT model in disseminating knowledge. Failure to adhere to the training protocol or curriculum was evident in one of the four trainers assessed who taught classes with little or no reference to the content of the training manual and teaching techniques acquired during the training. Another major criticism of this educational model is the reliance on trainees to go on and organise further training, which often results in a high rate of failure of follow through training. This critical limitation is, however, avoided in our model because the participants selected are regular tutors of primary healthcare workers with statutory responsibility for teaching the students mental health among other subjects. What we accomplished through the training was to update and enhance their knowledge whilst imparting interactive teaching skills so that they can be more proficient at their duty posts.

There were apparent limitations to our evaluations which were mainly subjective in nature. Attempts were made to make certain aspects as objective as possible. In observing the participants delivering lectures, two raters were used with an average of the scores recorded for each criterion. One of the

raters was also not part of the initial training, but was briefed about the criteria for rating, whereas the other is one of the authors (VM). Another limitation is the fact that the trainees were informed of the date of the monitoring visit ahead of time, which may have resulted in the lectures being well rehearsed. We addressed this by including a focus group discussion with students selected by the visiting team.

Conclusion

The impact of the TOT workshop on the activities of college of health sciences tutors largely persisted approximately 12 months post training. In addition to the need for booster training, participants highlighted policy and the need for curriculum review as some of the factors militating against effective integration of mental health into primary health care.

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CONFLICTS OF INTEREST

None.

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