

Article

Integration of mental health into primary care and community health working in Kenya: context, rationale, coverage and sustainability

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ABSTRACT

Integration of mental health into primary care is essential to meet population needs yet faces many challenges if such projects are to achieve impact and be sustainable in low income countries alongside other competing priorities. This paper describes the rationale and progress of a collaborative project in Kenya to train primary care and community health workers about mental health and integrate mental health into their routine work,

Within a health systems strengthening approach. So far 1877 health workers have been trained. The paper describes the multiple challenges faced by the project, and reviews the mechanisms deployed which have strengthened its impact and sustainability to date.

Keywords: integration, Kenya, mental health, primary care, sustainability, training

Introduction

The challenge of meeting population needs for mental health interventions across a country within the context of scarcity of specialist human resource faces all countries, but is most challenging in low income countries. This paper considers the challenge in Kenya, where GDP is low and health indices

are relatively poor,¹⁻³ and examines the rationale and progress to date of a project to integrate mental health into primary care. The methods and impact on health worker knowledge have been described elsewhere.⁴

Kenya has 23 psychiatrists in public service, of whom 16 are at the national level and seven are deployed to the provinces (one per province outside Nairobi); and around 500 psychiatric nurses, of whom only 250 work in mental health, deployed at national, provincial and district levels, so that each (new) district of around 150 000 will have only one, or rarely two, psychiatric nurses. (District boundaries have recently been reconfigured in Kenya by the coalition government so that the number of districts in the country has increased from 72 to 254, and this number may rise further.) Since the global prevalence of mental disorders is around for 1% for psychosis and 10% for common mental disorders (CMDs), this means that each district of 150 000 will have 1500 people with psychosis and 15000 people with a CMD. Therefore, unless mental health is integrated into community, primary care and district levels of the health system, population access to mental health care will be very severely restricted to the individual case-load which can be borne by the one mental health worker in each district. In contrast, the comparable figures for the UK are one psychiatrist and one psychiatric nurse per 5000 population.

With rates of 10% depression and 1% psychosis, each primary care health centre population of 10 000 will have 1000 people with depression and 100 people with psychosis (this excludes brief stress-related psychotic episodes which are much more common). Traditional health practitioners are common in Kenya, as elsewhere in sub-Saharan Africa, and while their understanding of mental disorders and their causes and consequences is often compatible with western health concepts, and although they are probably often able to deal with mild depressions and brief stress-related psychoses, they themselves say that they cannot cure severe depression or long-term psychosis.

A number of low and middle income countries make use of volunteers, able citizens recruited to assist health services as volunteer community health workers (CHWs). Typically these volunteers have no formal health training (they may be retired civil servants) but they are recruited to be attached to specific primary health centres and to specific small units of population. In Kenya, each health centre may have around 20 CHWs, and they are to be found in urban as well as rural areas, although typically their deployment has been more successful in rural areas. Thus CHWs in Kenya are viewed as being in charge of the health of the community.⁵ Although until now they were volunteers, recently the government has given the community the responsibility of remunerating the CHWs in some way. Village committees identify individuals capable of leadership and management, and appoint them as CHWs to

the village health committee, who report to the dispensary nurse. CHWs are trained in prevention, promotion and identification of health problems, and in appropriate interventions including referral to the dispensary. Their role is intended to be broad and to be able to encompass the wider issues of gender violence, child abuse and HIV spread, but in practice CHWs still largely focus on HIV, malaria, tuberculosis, reproductive health, child health and immunisation.

In Kenya, CHWs are coordinated by community health extension workers (CHEWs), who are health workers at primary care Levels 2 and 3 who have been identified and trained to supervise, coordinate, monitor and evaluate community health services, including the CHWs at Level 1. Dispensaries and health centres each have a dispensary and health facility committee, and district hospitals have a hospital management board. These structural levels and their staffing have been set out in Table 1, together with the deployment of mental health specialists. Each level prepares an annual operational plan which is fed up the system to inform the annual national operational plan.

If all clients with mental disorders identified at Levels 1, 2 and 3 were referred to the district hospital at Level 4, the district services would not be able to cope. A district hospital with a catchment population of 500 000 would have to deal with 25 000 cases of severe depression and 5000 cases of long-term psychosis per year – this would clearly be an unsustainable case-load. The only way the system can deliver mental health care to the population is if primary care is strengthened to be a key stage in the pathway between community and district level. Indeed, people with mental disorders are already attending primary care, but although those with psychosis, a condition which is relatively easy even for lay people to diagnose, are generally accurately diagnosed, those with depression, anxiety and other common mental disorders are usually misdiagnosed as having a physical illness.

Therefore, primary care effectiveness and performance in relation to physical health outcomes and workload would be strengthened by improved knowledge, attitudes, skills and competencies in mental health. This would enable accurate detection and treatment of depression and somatisation (termed '*hapa na hapa syndrome*' by health workers in Kenya, meaning '(pains) here and here'), avoid misdiagnosis of infections and mistreatment with unnecessary investigations, antibiotics and antimalarials and assist rational use of investigations and medications, avoiding wastage of the scarce available resources. There would also be a reduction in repeat attendances by people seeking relief from multiple somatic symptoms of psychological origin; enhanced compliance with immunisation of children; improved

Table 1 The Kenya health system (levels, staffing, population coverage, and mental health staffing)

| Level | Facility | Staffing | Population coverage | Specialist mental health staffing |
|---------|---------------------|---------------------------------------|---|--|
| Level 6 | National hospitals | Doctors, nurses and clinical officers | 34 million | 21 psychiatrists (7 Mathari Hospital, 6 Kenyatta Hospital, 8 Moi University Hospital, 3 MOH Mental Health Division) 100 psychiatric nurses (70 Mathari, 30 Kenyatta, 1 MOH) |
| Level 5 | Provincial hospital | Doctors, nurses and clinical officers | 4 million | 1 psychiatrist per province 2 psychiatric nurses per provincial hospital (variable) |
| Level 4 | District hospital | Nurses and clinical officers | 500 000 in old districts and 150 000 in new districts | 0 psychiatrists per district; less than 1 psychiatric nurse per new district or 2 psychiatric nurses per old district (variable) |
| Level 3 | Health centre | Nurses and clinical officers | 20–30 000 | None |
| Level 2 | Dispensary | Nurses and clinical officers | 10 000 | None |
| Level 1 | Community | Volunteer community health workers | 20 families or 100 households | None |

immunity; improved life skills and hence prevention of HIV and improved compliance with treatments for physical illness.

It is sometimes argued that primary care is already too overloaded, and that mental health is not a sufficient priority to add to the primary care load. This argument is unsustainable for two reasons. First, the clients are already attending primary care, aggravating the workload in the ways described above, and this workload will only be decreased if mental disorders are adequately addressed – it won't be decreased by ignoring mental disorders. Second, for the reasons described above, mental health is a key priority because of its major impact on physical health as well as on social, educational and economic performance.⁶

Situation appraisal in Kenya of practice in primary care found that the general nurses and clinical officers who staff health centres (Level 3) and dispensaries (Level 2) have received a small amount of basic training on mental health. Until the start of this project, they had not received detailed training in multi-axial assessment, diagnosis and treatment, nor any in-service training or supervision for mental health (Kiima and Jenkins, unpublished).

Primary care staff receive, diagnose and treat people with psychosis, which is generally relatively visible even to lay people. Where transport and facilities are available, they may refer very difficult and complex cases of psychosis to district or provincial level (see Table 1). Besides the seven provincial hospitals, only seven districts have a psychiatric inpatient unit, but patients may be admitted to general medical beds as general hospitals are also gazetted under the Mental Health Act. Families also often self-refer directly to district, provincial and even national hospitals. However, people with the more common mental disorders of depression and anxiety, who form well over 30% of primary care attenders, are rarely diagnosed, and if they are, are rarely managed appropriately (see below). Instead, such misdiagnosed patients are given antimalarials or antibiotics, which of course do not solve the underlying problem of depression, but are costly (and increasingly so with newer and more expensive antimalarials). This mistreatment also contributes to drug resistance and health centre overload, as well as getting rid of protective low grade parasitaemia, as the clients become repeat consulters until their underlying depression is resolved. A recent study

in Nairobi indicated that 46% remain unrecognised and are instead misdiagnosed as having malaria, typhoid, amoebiasis etc.⁷ A recent Wellcome research study in Kenya showed that only 10% of district hospital inpatients who had been diagnosed with malaria actually have it.⁸

The integration of mental health into primary care has been a policy objective in Kenya for two to three decades,⁹ as Kenya adopted a primary health care strategy in 1979, recognised the importance of the mental dimension of health in its 4th Development Plan¹⁰ and added mental health as the ninth element of primary health care in 1982. However, there was no specific allocation of resources to implement this, and no continuing professional development on mental health for staff at Levels 1 to 4. Indeed, this is a common problem across low income countries, which give low status and few resources to national mental health programmes.

A collaborative programme of work was therefore established between the Ministry of Health (MOH), the WHO Collaborating Centre and Kenya Psychiatric Association (KPA), funded by Department for International Development (DFID) from 2001 to 2004, which included: detailed situation appraisal of context, needs, resources, provision and outcomes using the mental health country profile;¹¹⁻¹³ a focus group study of 60 traditional healers in Maseno District, exploring their views of mental illness, aetiology and treatment;¹⁴ a study of attitudes of primary care staff about mental illness;¹⁵ epidemiological surveys of mental disorders in a 1:50 sample of 50 000 people in Maseno rural district near Kisumu;¹⁶⁻¹⁸ surveys of primary care attenders;^{7,19} adaptation of the World Health Organization (WHO) primary care guidelines for Kenya, and development of mental health policy and strategy.²⁰ The programme was also informed by other Kenyan research studies on the prevalence of mental disorders at district²¹⁻²⁵ and health centre levels;^{7,26} by a national survey of views of district level staff about mental illness;²⁷ and a household survey exploring the conceptual model underlying the views of the general population about mental illness.²⁸ These studies indicated the need for continuing professional development (CPD) on mental health for front-line health workers.

Therefore a second collaborative project between the MOH, the KPA and the World Health Organization Collaborating Centre (WHOCC) was established between 2005 and 2010, funded by the Nuffield Foundation⁴ and designed to train primary healthcare staff across Kenya, using a sustainable general health system approach, with the content of training aligned to the generic tasks of the health workers. The training was integrated into the normal national training system by delivering it through the Kenya Medical Training College which is responsible

for basic, post-basic and continuing training of primary care staff (nurses and clinical officers). In Kenya, general practitioners are found in the private system but not in the public sector at primary health care centre level.

The primary care training programme was accompanied and facilitated by continuing policy dialogue about the supply of medicines to primary care, together with more general dialogue about health management information systems, closer alignment of mental health with other health programmes and integration into the national health sector strategic plan and the annual operational plans.

Capacity building 40-hour workshops were also held for 200 district and provincial level psychiatric and public health staff, in order to facilitate the inclusion of mental health in the district and provincial annual operational plans and to promote the coordination and supervision of mental health services in primary care by district psychiatric nurses and district public health nurses.

The ultimate goal was sustainable training to improve accessibility and equity of mental health provision for the general population, to improve mental, physical and social outcomes and to contribute to the achievement of physical health targets and the Millennium Development Goals. In this way, not only people with mental and neurological health problems, but also their families, the community and the economy would benefit.

Methods

Memoranda of Understanding were signed in 2004 between the MOH, Kenya Medical Training College (KMTCC) and the KPA on the one hand and the WHOCC on the other and the project started in May 2005. Curriculum and teaching materials were developed by the WHOCC in dialogue with its Kenyan partners, based on the Kenyan adaptation of the WHO Primary Care Guidelines. The content was contributed to by colleagues in primary care, the MOH, the University of Nairobi, and the professional and regulatory bodies for nurses and clinical officers. The training course, together with the adapted WHO Primary Care Guidelines, includes sections on child health, reproductive health, HIV and malaria which have been agreed with the relevant MOH policy teams. Representatives from the National Council of Clinical Officers, the Nursing Council of Kenya and the MOH Divisions of Reproductive Health, Child and Adolescent Health and Malaria attended the initial courses for trainers. The course was approved by the Nursing Council of Kenya and

the Kenya Clinical Officer Council for 40 hours credit for CPD of staff, which is now mandatory in Kenya.

Apart from a pause around the time of the political tension preceding the December 2007 election and the post-election violence in early 2008, the course has been rolled out in six regional training centres around Kenya between 2006 and 2010. The course content is set out in Table 2.

Eligibility for the course, call up, methods of training and quantitative impact on knowledge and attitudes are described in detail elsewhere.⁴

Results

Numbers trained

Table 3 shows the numbers of nurses, clinical officers and others trained in each province in Kenya to date.

Qualitative written feedback from course participants

Box 1 gives participant feedback about the training from one of the courses and illustrates the range of benefits perceived by the participants.

Monitoring of centres where people had been trained

Fifteen health facilities across two districts were visited by a senior psychiatric nurse at the request of the MOH in order to appraise how efficient and effective was the working of the Level 2 and 3 service providers in relation to the role of CHWs in mental health management following their participation in the training course. The quality of the clinical work and intersectoral work found is described elsewhere.⁴ The observer found that Level 2 dispensary health workers were giving basic training to the CHWs, as they had been asked to do, so that the CHWs could conduct mental health work in the community. Taking one of the visited dispensaries as an example of how this is working in practice, the CHWs meet every Friday, when they are given elementary mental health knowledge on a range of topics drawn from the training programme. Their mental health activities include mental health education in their respective communities and villages, follow-up of people with severe mental illness who have lapsed in their attendance at the dispensary, and supervision of treatment at home. They recognise early signs of mental disorders, relapses and extra-pyramidal side effects of medication and give advice on when to seek medical attention, thus improving the referral system from the community to the health facility.

Table 2 Structure and content of the training programme

| Module | Content |
|---|---|
| Core concepts | Mental health, mental illness, neurological disorders Contributions to Global Burden of Disease, physical, social and economic outcomes and to the Millennium Development Goals |
| Core skills | Communication, assessment, mental state examination, diagnosis, management, managing difficult cases, managing violence, breaking bad news |
| Common neurological disorders | Epilepsy, Parkinson's, headache, dementia, toxic confusional state |
| Mental disorders | Content based on the Kenya version of the WHO primary care guidelines (depression, anxiety, somatisation, dissociation, post-traumatic stress disorder, sexual disorders, eating disorders, acute psychosis, bipolar disorder, chronic schizophrenia, childhood emotional and conduct disorders, attention deficit hyperactivity disorder, autism, dyslexia and learning disabilities) ^{29,30} |
| Health and non-health sector policy and practice issues | General health policy, mental health policy, mental health legislation, linkages between mental health and child health, reproductive health, HIV and malaria; roles and responsibilities for each level in the health system, health management information system and the value of data collection, working with community health workers and with traditional healers and integration of mental health into annual operational plans |

Table 3 Numbers trained by province and cadre

| Province | Trainers | Primary care staff | | | Supervisors | | | Total |
|---------------|----------|--------------------|-----------------|-------|-------------------|--------------|-------------------------------|-------|
| | | Clinical officer | Nursing officer | Other | Psychiatric nurse | Psychiatrist | District public health nurses | |
| Central | 4 | 79 | 242 | 4 | 19 | 3 | 4 | 355 |
| Coast | 7 | 37 | 121 | 9 | 15 | 2 | 7 | 198 |
| Eastern | 9 | 35 | 215 | 7 | 25 | 5 | 10 | 306 |
| Nairobi | 22 | 30 | 129 | 8 | 1 | 2 | 1 | 193 |
| North Eastern | 0 | 10 | 39 | 1 | 1 | 1 | 1 | 53 |
| Nyanza | 12 | 37 | 109 | 11 | 12 | 2 | 9 | 192 |
| Rift Valley | 12 | 90 | 199 | 56 | 41 | 5 | 11 | 414 |
| Western | 5 | 9 | 103 | 2 | 19 | 1 | 9 | 148 |
| Total | 71 | 327 | 1157 | 98 | 133 | 21 | 52 | 1859 |

Discussion

Mental disorders are common in primary care across the world,³¹ and it is crucial to research effective methods of intervention in resource constrained environments. A few specific interventions for single disorders or single client groups in low income countries have been evaluated,³² but it remains challenging to scale up to dealing with the majority of mental disorders and client groups within existing human and financial resources. It is crucial to evaluate interventions which can be operated within existing resource constraints, rather than to devise a mental health programme which the country cannot afford, either financially, in terms of available human resource or in terms of time for training taken out of the health delivery system. Evaluations of general integration of mental health into primary care through training primary care teams have so far been conducted in Sverdlovsk, Russia,^{33,34} the Moshi and Morogoro regions of Tanzania³⁵ and in Guinea Bissau.³⁶

The impact of the course has been enhanced by the various organisational and operational interventions designed in collaboration with the MOH to support the integration of mental health into primary care. These included: the construction of guidelines for roles and responsibilities in mental health within the various tiers of the overall health

service, together with delineation of the potential contributions of other key sectors; capacity building workshops both to establish and strengthen district mental health coordination and supervision of mental health services in primary care, and also to strengthen district capacity to ensure the inclusion of mental health in district annual operational planning; coordination and supervision of primary care by district mental health nurses and district public health nurses; adaptation of the WHO Primary Care Guidelines for mental health for Kenya; and dialogue with the Nursing Council of Kenya and the Kenya Clinical Officer Council about requirements for CPD for primary care.

The project has demonstrated the importance of the donor having a detailed understanding of the local situation. Thus over the five years the funder responded to rising inflation, rising local costs, additional local costs of teaching fees for lecturers conducting short courses and the health sector reforms which impact on primary care supervision and delivery, in order to enhance the sustainability of the project.

In terms of future sustainability of the training, the training course is being delivered by local KMTC lecturers as part of their normal working programme, so that the capacity to deliver mental health CPD has been well developed within the college (each lecturer has now run several such courses). The use of KMTC or Rural Health Training Centre (RHTC)

Box 1 Qualitative comments from one set of participants

- The course is good for it will enable the health worker to deal with the client at the place of work. The course will help my work because most of the cases which I used to refer, now I will treat them first before referring them.
- The course is very important. The course will help me to diagnose the different types of mental illness and manage them, especially in relation to education, treatment and referral.
- This course is of much importance to the health workers. It will help because I will be able to diagnose and treat mental patients. The course is of much use in the community and it has increased my knowledge. It will help me to make a proper diagnosis. We need better medicine supply for the patients. I would like to attend further seminars on mental health at least once a year.
- This course is good for additional knowledge. It will help me to manage the patients in the dispensary level before referral. The course is very enjoyable and encouraging for further studies, e.g. to continue with another workshop. It will help me in my work in treating patients with mental problems and the community around. The course should be delivered to every health worker so that they know the importance of mental health. It should also be given to all health workers in district hospitals.
- The course is worthwhile and very enlightening. It will help me to reduce unnecessary referrals to the main hospital and instead I shall manage the cases I am able to at the local community.
- This is a good course. I will be able to apply the skills I have learned.
- Although stressing at times, the course has been a success and I gained more knowledge about mental health. The course will help me so much because I can now attend to mentally ill clients in my centre.
- It was wise to think of this course because mental health problems used to be mistaken for another diagnosis like malaria. It will help me in my work because now I will be able to make clear diagnoses and manage them better.
- The course is good because it will help me with patients suffering from mental ill health. It will help me in future because I will be able to use the guidelines in the manual, and I will be able to use the skills I have acquired.
- The course is interesting and it will help me to treat the patients. I have learned how to differentiate many issues, diagnosis and treatment . . .
- The course is important and will help me because it has increased my knowledge. I appreciate the additional knowledge and I expect a certificate.
- The course helped me realise that the psychotic cases around my area of work have never been treated before.
- The course was very useful. It will help me in my work. Some conditions which I have learned, I will be able to tackle them effectively.
- The course was nice and educative. The training will help a lot in my work and I will be in a better position to manage mental patients right from the village.
- The course is worthwhile. Need to train more than one personnel in a facility for continued services even if one is on leave.
- It will help my work – I will be able to diagnose and treat people with mental illness, counsel and where necessary refer.
- The course is very important because it has helped me to know more about mental disorders and different classifications and their management. It will help my work. We should also have been shown different personality disorders in the videos.
- The course is very important. It is helping those who present with any form of mental illness.
- The course is good as it reminded us what we forgot and now we can use the skills to integrate mental health issues in our primary healthcare programmes thus reaching many people with mental health problems. It will help my work by taking time to interview the patient and identify those with mental illness for early intervention and rehabilitation. Occupational therapists also need to be targeted for the kind of training especially those carrying out community based rehabilitation programmes so that they can include mental health in their activities.
- The course is very helpful in my workplace. It will help me in my work – I will be able to identify the mentally ill patients with differential diagnosis and their management.

Box 1 Continued

- This course is very beneficial; enable me to deal with mental illness in the community. It gives me ideas on how to identify, advise and treat people with mental illness, give information to the relative, and if necessary refer for further management. Other stakeholders in the community, e.g. schools, churches should also be trained, to create awareness that mental illness is like any other illness, and not witchcraft. The medical workers need frequent training to update them to handle the growing burden of mental illness.
- The course was helpful because I have learned how to diagnose and treat many psychotic patients. It will help me in my work. I will be able to diagnose and treat and if possible make a follow up of patients. It may help me in my work because it will make me take care of mentally disturbed patients much better.
- The course is good, it will help me give better care.
- It is a good course for update on mental health for all health workers. It will help me in my workplace as I will be confident enough in managing patients with mental illness at the health centre level.
- The course is very helpful for me because I am now equipped and now I can be able to give services to mental health patients. It will help my work as I now have better skills, knowledge and understanding of the mental health. I suggest that many more medical personnel receive the course.
- This course is important to our societies. It is very helpful that some of the unnecessary referrals will be reduced. It is good for capacity building. I will be able to manage the patients before referral.
- The course is essential since it contains the present update in mental health and psychiatry in general. It will help my work because I am now even more able to identify and manage the mentally ill person. More health workers need to be trained in this course.
- It is a very helpful course to help me be able to manage psychiatric patients in the facility. It will reduce referrals to the district hospital. It could be wise and more convenient for the course to be under the MOH in the district hospital rather than KMTC because of problems the participants have experienced for the whole week.
- The course is good.
- Good course, it will help my work I am enlightened on the new skills in mental health.
- This course is helpful to the health worker in order for us to deal and manage effectively mental illness in our community. It will help me diagnose and manage mental illness. I as a participant have gained knowledge and am properly empowered to manage mental illness effectively.
- Enabled me to change the attitude on mental ill patients and give them quality services.

venues has also built organisational capacity to deliver the logistics of courses, and has strengthened the training facilities. The KMTC Academic Board has now agreed to run the course as an income generating CPD short course, starting in April 2010. Accordingly, curricula and teaching materials were disseminated to KMTC Nairobi and its satellite medical training colleges (MTCs), the MOH RHTCs, the University of Nairobi and Moi University to use in the basic training programmes for the different health cadres and for post-basic courses and CPD programmes; and for provincial psychiatrists and district psychiatric nurses to use in CPD courses. In addition, the training course will be offered by the regional training centres as part of their provincial annual operational plans. The training has also been integrated in some districts into the recent national training initiative for community health workers. The teaching materials are currently being introduced into some of Kenya's private practice organ-

isations (African Air Rescue Health Insurance (AAR) and Kenya's Private Practitioners Society). The teaching materials have also been adapted for use in Malawi (where they are already the subject of an RCT), Ghana, Nigeria, Pakistan, Ecuador, Iraq, Oman and Yemen.

The project has survived the constraints of rampant inflation (see Box 2) leading to higher unit costs for the training, the recent election and post-election conflict resulting in a period of several months when it was not possible to train and the post-election division of the MOH into two ministries, which has led to additional planning complexity and human resource pressures within the health system. In addition, during the course of the project, the KMTC moved from being a part of the MOH to become a parastatal organisation with a remit to be self-financing, and the project has had to relate to three Directors and one Acting Director of KMTC. Despite having to weather these organisational

Box 2 Inflation costs

| Year | Annual inflation rate |
|------|-----------------------|
| 2004 | 11.6 |
| 2005 | 10.3 |
| 2006 | 14.5 |
| 2007 | 9.8 |
| 2008 | 21.8 |

Source: Kenya National Bureau of Statistics

changes and events, the project has succeeded in training 1866 staff so far and is well embedded within Kenya's public health sector, with 41 local trainers now very experienced in delivering the course. The course is accredited for 40 hours of CPD by both the Nursing Council and the Kenya Clinical Officer Council. Evaluation through participant feedback, external feedback, pre- and post-testing, and direct observation of subsequent practice indicate a beneficial effect of the training. Further research in the form of a RCT will test and quantify this effect, and will be reported in due course. An additional useful outcome of exposure to the project is that the chairman of the Kenya Medical Research Institute

(KEMRI) has offered to integrate mental health into the KEMRI research centres.

Conclusion

Key elements of the training programme which we consider are assisting with impact and sustainability are summarised in Table 4. We recommend that similar efforts to train front-line health workers should be conducted in partnership with the MOH, in the context of the country's health and mental health policies. The project should agree with the MOH the appropriate local training institution for CPD for primary care, and work through that organisation to train local trainers who are likely to remain in post for a long time. Call up of participants should be through the MOH to ensure that appropriate people attend for training.

We suggest that training materials should be well structured and comprehensive, as funds for primary care training in mental health are sparse, and need to be used to maximum effect; knowledge about one area often depends on understanding of another area, and contextual understanding is often crucial

Table 4 Key elements of the training to assist impact and sustainability

| Sustainability | Training course delivery | By the local training institution relevant for CPD for primary care, using local lecturers |
|--------------------------|---|--|
| | Training course materials | Distributed to training institutions for integration into basic, post-basic and CPD curricula |
| | Accreditation of the course materials for Kenya CPD | By Nursing Officer Council of Kenya and Kenya Clinical Officer Council |
| | Regular support and supervision | By district psychiatric nurses, and district public health nurses |
| | Continuous policy dialogue with MOH | Integration of mental health into Kenya Essential Package of Health, medicine supply, Health management information System (HMIS), support and supervision to primary care |
| | Linkage to local planning | Capacity building workshops for district and provincial mental health staff to encourage inclusion of mental health in district and provincial health plans and budgets |
| Impact on health workers | Training content | Comprehensive, interdependent modules, consistent with local health policy and health sector reforms, and tailored to local health priorities |
| | Training methods | Multimethod, active, participatory, assessed |
| | Reinforced by | Distribution of Kenya adaptation of WHO mental health primary care guidelines, teaching materials, regular supervision |

for effective implementation. Thus the course content set out in Table 2 was for the participants we consulted and is for us the irreducible minimum. The course materials need to be tailored to the local country context. We consider multimethod training delivery to be desirable, and that regular role plays and discussion of these should be essential components of the training, to reinforce skills acquisition. We also consider that the emphasis on the linkages between mental and physical health priorities has been crucial in assisting the health workers to understand how they can readily integrate mental health into their everyday work.

Training needs to be reinforced by the provision of locally tailored good practice guidelines which the participants can use for years after the training, accompanied by all the course handouts; and by regular supervision from the district level, which needs to be organised through the MOH. Supervisors therefore also need to be trained so that they have a good understanding of their supervisory role and skills. In addition, thought needs to be given to access to sustainable local budgets for transport for supervision, and there needs to be appropriate capacity building for this, including building district and provincial capacity to achieve inclusion of mental health in local annual operational planning.

To further assist sustainability, training materials need to be given to local training institutions so that they can include them appropriately in basic and post-basic courses to equip the new generation of health workers, as well as including them in the long-term in short courses for CPD. Sustainable CPD will need local funds rather than permanent reliance on donors, which for mental health in particular is never possible; again, building district and provincial capacity to achieve inclusion of mental health in local operational plans will assist this. If CPD is still not mandatory in the country concerned, policy dialogue about this will be crucial so that there is a strong incentive for health workers to access CPD. Local accreditation of the course for CPD is crucial. The transition from project funding to local funding needs to be carefully planned and nurtured before the end of the project, to assist with sorting out difficulties.

Continuous policy dialogue is necessary throughout the project to solve a variety of issues such as the supply of medicine, supervision, annual planning etc., not to mention collaborative planning to withstand the extraneous difficulties which can arise, e.g. the post-election conflict in the case of this project.

The progress of the project needs to be carefully monitored, and action taken where necessary as soon as possible to keep the project on track. Flexible funding to enable the project to weather unpredictable

events such as conflict and rampant inflation, and to respond to changing health sector reforms, will greatly assist long-term sustainability after the project has ended.

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CONFLICTS OF INTEREST

None.

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Accepted April 2010

