



Acceptability and feasibility of using non-specialist health workers to deliver mental health care: Stakeholder perceptions from the PRIME district sites in Ethiopia, India, Nepal, South Africa, and Uganda



Emily Mendenhall^{a, b, *}, Mary J. De Silva^a, Charlotte Hanlon^{c, d}, Inge Petersen^e,
Rahul Shidhaye^f, Mark Jordans^{c, g}, Nagendra Luitel^h, Joshua Ssebunnyaⁱ,
Abebaw Fekadu^{d, j}, Vikram Patel^{a, f, k}, Mark Tomlinson^{l, m}, Crick Lund^l

^a Center for Global Mental Health, London School of Hygiene and Tropical Medicine, London, United Kingdom

^b School of Foreign Service, Georgetown University, Washington, DC, United States

^c Center for Global Mental Health, Institute of Psychiatry, King's College London, London, United Kingdom

^d Addis Ababa University, College of Health Sciences, School of Medicine, Department of Psychiatry, Addis Ababa, Ethiopia

^e University of KwaZulu-Natal, Durban, South Africa

^f Centre for Mental Health, Public Health Foundation of India, New Delhi, India

^g HealthNet TPO, Amsterdam, The Netherlands

^h TPO Nepal, Kathmandu, Nepal

ⁱ Makerere University, Kampala, Uganda

^j King's College London, Institute of Psychiatry, Department of Psychological Medicine, the Affective Disorders Research Group, London, United Kingdom

^k Sangath, Goa, India

^l Alan J Flisher Centre for Public Mental Health, Department of Psychiatry and Mental Health, University of Cape Town, Cape Town, South Africa

^m Stellenbosch University, Stellenbosch, South Africa

ARTICLE INFO

Article history:

Received 17 January 2014

Received in revised form

25 July 2014

Accepted 27 July 2014

Available online 29 July 2014

Keywords:

Task-sharing

Task-shifting

Global mental health

Mental health services

Low- and middle-income countries

Acceptability

Feasibility

ABSTRACT

Three-quarters of the global mental health burden exists in low- and middle-income countries (LMICs), yet the lack of mental health services in resource-poor settings is striking. Task-sharing (also, task-shifting), where mental health care is provided by non-specialists, has been proposed to improve access to mental health care in LMICs. This multi-site qualitative study investigates the acceptability and feasibility of task-sharing mental health care in LMICs by examining perceptions of primary care service providers (physicians, nurses, and community health workers), community members, and service users in one district in each of the five countries participating in the PRogramme for Improving Mental health care (PRIME): Ethiopia, India, Nepal, South Africa, and Uganda. Thirty-six focus group discussions and 164 in-depth interviews were conducted at the pre-implementation stage between February and October 2012 with the objective of developing district level plans to integrate mental health care into primary care. Perceptions of the acceptability and feasibility of task-sharing were evaluated first at the district level in each country through open-coding and then at the cross-country level through a secondary analysis of emergent themes. We found that task-sharing mental health services is perceived to be acceptable and feasible in these LMICs as long as key conditions are met: 1) increased numbers of human resources and better access to medications; 2) ongoing structured supportive supervision at the community and primary care-levels; and 3) adequate training and compensation for health workers involved in task-sharing. Taking into account the socio-cultural context is fundamental for identifying local personnel who can assist in detection of mental illness and facilitate treatment and care as well as training, supervision, and service delivery. By recognizing the systemic challenges and sociocultural nuances that may influence task-sharing mental health care, locally-situated interventions could be more easily planned to provide appropriate and acceptable mental health care in LMICs.

© 2014 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-SA license (<http://creativecommons.org/licenses/by-nc-sa/3.0/>).

* Corresponding author. School of Foreign Service, Georgetown University, Intercultural Center, STIA Program, 37th & O Streets, NW, Washington, DC 20057, United States.
E-mail address: em1061@georgetown.edu (E. Mendenhall).

1. Introduction

The need for improved access to mental health services in low- and middle-income countries (LMICs) has been strongly argued and given political priority among public health researchers and practitioners (Prince et al., 2007). This argument builds upon evidence that mental, neurological, and substance abuse disorders account for more than ten percent of the global burden of disease (Murray et al., 2012) and almost three-quarters of this burden affects people living in LMICs (Mathers and Loncar, 2006). Yet, the gap between the availability and need for mental health services, known as the “treatment gap” exceeds 75 percent in most parts of the world (Kohn et al., 2004) and in the lowest income countries, such as Ethiopia, the mental health treatment gap can be as high as 90 percent (Alem et al., 2009). To bridge this gap, researchers and practitioners have proposed a rational redistribution of mental health services, known as task-sharing (also, task-shifting), from specialist mental health professionals, including psychiatrists, psychologists, and psychiatric nurses, to non-specialist health workers in primary care and community settings (Patel et al., 2007).

The enormous scarcity and inequality in the distribution of specialist mental health professionals underscores the need for task-sharing mental health services (Kakuma et al., 2011). It is estimated that there is a current shortage of 1.18 million specialist mental health personnel in LMICs (Kakuma et al., 2011). Researchers and practitioners have proposed transforming the role of psychiatrists, psychologists, and psychiatric nurses from service-delivery to public mental health leadership in LMIC settings to overcome this shortage of specialist care delivery (Lancet Global Mental Health Group, 2007). This new role involves designing and managing mental health treatment programs, building clinical capacity in primary care settings, supervision and quality assurance of mental health services, and providing consultation and referral pathways (Patel, 2009).

The proposed model of task-sharing, a heterogeneous concept, requires mental health specialists to supervise non-specialist nurses, physicians, or CHWs within a collaborative stepped care approach. For example, CHWs could identify people with mental illnesses at the community level and refer them to a primary health center for diagnosis and treatment. Primary care practitioners, then, can administer psychiatric treatment, including social support, psychosocial therapies, and medications, in lieu of a psychiatrist or psychiatric nurse; this approach allows a broader scope of treatment in primary care when specialists are unavailable. Despite the fact that such an approach is still in its infancy, it has been evaluated in a number of randomized controlled trials. A Cochrane review summarizing this body of research indicates that task sharing mental health care in LMICs may improve clinical outcomes for depressive disorders, post-traumatic stress disorder, alcohol use disorders, and dementia (van Ginneken et al., 2013), and may be cost-effective (Araya et al., 2003; Pereira et al., 2011; Rahman, 2007). Despite this growing evidence base on the effectiveness of task sharing, little is known about stakeholder perceptions – from community members and community health workers to specialists and policy makers – of acceptability and feasibility of task-sharing mental health services in such contexts.

Two important papers demonstrate what is needed for task-sharing mental health services in LMICs. The first paper suggests three essential components: 1) contextually specific research to determine how and what task-sharing framework is suitable in light of local resource constraints and health care delivery systems; 2) training and a strong supportive supervisory framework for non-specialists; and 3) sufficient specialists who can provide the necessary referral support (Petersen et al., 2011). Second, a recent systematic review including 21 qualitative studies found task-

sharing mental health services in LMICs was largely considered acceptable and feasible by service users as well as health care providers (Padmanathan and DeSilva, 2013). However, important limiting factors emerged that require further investigation, including context-dependent variation in participants' satisfaction with having mental health needs met, the importance of the personal characteristics of non-specialist workers such as gender, age, training, and their role in the community; concern that lack of supervision for health personnel may result in psychological distress; logistical barriers such as transport, private spaces for meeting, restrictions on who can prescribe psychotropic medications, and funding for health worker training; and issues around compensation, support, and clearly delineated roles for health care providers. The major limitation of the review was that exploring the acceptability or feasibility of task-sharing was not the primary aim of the studies reviewed, and twelve of the 21 studies were of unknown quality. In addition, many of the studies had small sample sizes, and none took a multi-country approach using common methodology. As a result, gaps remain in our knowledge about the context-specific factors that might enable or inhibit the successful implementation of this strategy.

This article critically examines stakeholder perceptions of the acceptability and feasibility of task-sharing across five settings that plan to roll out district level mental health care plans using task-sharing in primary care. Our purpose is to elucidate what context-specific as well as cross-site factors may be fundamental to scaling up mental health services in these settings. In order for task-sharing to be effective, both people receiving care and those providing mental health services must concur that delivering mental health care through task-sharing is acceptable and feasible. Through a critical analysis of multiple stakeholder perceptions of task-sharing in five different contexts, this paper sets out to provide insight into the acceptability and feasibility of doing so.

2. Methods

2.1. PRIME country settings: data sources

This study is part of the PRogramme for Improving Mental health care (PRIME). PRIME aims to generate evidence on implementing and scaling up mental health services in primary care in Ethiopia, India, Nepal, South Africa, and Uganda (Lund et al., 2012). The present study reports on the results of qualitative research from one district in all five countries exploring stakeholder views on the acceptability and feasibility of task sharing for mental health care delivery at the pre-implementation stage, the results of which were used to inform the development of district mental health care plans (Hanlon et al., 2014). The PRIME project is described in full elsewhere (Lund et al., 2012).

The study sites were selected for a number of reasons (Lund et al., 2012). Each site had leading research institutions that were well established and had the capability for carrying out high-quality research as well as strong local partnerships between these research institutions and the Ministries of Health and non-governmental organizations (NGOs) as implementation partners. The study sites also present varied contexts that offer opportunities for adaptation of the interventions and evaluations of impacts in diverse socially disadvantaged populations in LMICs. Within each country, one district or sub-district was chosen to represent diverse socio-cultural, urban/rural, political, and economic contexts, which include extremely under-resourced settings (Uganda and Ethiopia), a fragile state setting (Nepal), and middle-income countries marked by high levels of socio-economic inequality (India and South Africa) in order to explore issues around implementing mental health services in a range of LMIC settings (Lund et al., 2012). Full details of

Table 1
Qualitative data collected across country sites.

Country	Community members		Service users and caregivers		Community health workers ^c		Primary health care workers		Specialists and policy makers		Total	
	FGD ^a	IDI ^b	FGD	IDI	FGD	IDI	FGD	IDI	FGD	IDI	FGD	IDI
Ethiopia	1 (8)	10	1 (10)	0	1 (8)	0	3 (18)	0	0	4	6 (44)	14
India	2 (16)	0	0	0	0	0	2 (16)	0	0	11	4 (32)	11
Nepal	3 (30)	9	0	2	2 (18)	2	4 (36)	15	0	5	9 (84)	33
South Africa	0	10	0	53	4 (19)	3	1 (3)	11	0	10	5 (22)	87
Uganda	4 (27)	0	2 (15)	0	4 (27)	0	2 (14)	0	0	9	12 (83)	9
Total	10 (81)	29	3 (25)	55	11 (72)	5	12 (87)	26	0	39	36 (265)	154

^a Focus Group Discussions (FGDs) are listed as how many FGDs were conducted and in parentheses how many people participated in those FGDs (*n* FGDs (*n* participants)).

^b In-depth interviews (IDIs).

^c We use the term “Community Health Workers” (CHWs) to include those working at the community level, including those who may not be titled “CHWs” such as Village Health Workers in Nepal or Health Extension Workers in Ethiopia.

the country sites are presented elsewhere (Hanlon et al., 2014; Jordans et al., 2013). We received ethics approval from all country site partner institutions, in addition to the Human Research Ethics Committee, Faculty of Health Sciences, University of Cape Town (HREC Ref: 412/2011) and the World Health Organization.

Despite the contextual variation of the study sites, we conducted a similar approach across country sites for the recruitment of study participants and collection of qualitative data. This included shared goals for study participant recruitment and a cross-country topic guide (augmented in some countries depending on relevance and local priorities). Despite the cross-country protocol, contextual variation in the composition of local stakeholder groups and logistical considerations meant that there were some variations between sites in the sample sizes and composition of the Focus Group Discussion (FGDs) and In-Depth Interviews (IDIs) (Table 1). Data in each site were collected from 1) community members, including community leaders and lay people; 2) service users, carers, and family members; 3) CHWs; 4) Primary Health Care (PHC) workers, including primary care physicians, nurses, and clinical officers; and 5) specialists and policy makers, such as district heads of mental health departments. Qualitative data were collected across a diverse range of actors involved in task-sharing mental health care (Table 1). We determined theme saturation was met by evaluating throughout the data analysis process whether new information was generated using a coding framework we generated. For instance, the Nepal team found that they had oversampled, and had more data than they needed. In Ethiopia, they stopped sampling when they weren't receiving any newly emergent themes. Subsequently, the Ethiopian team have conducted more qualitative research about acceptability and feasibility of task-sharing interventions for psychosis in a neighboring district and reached very similar findings.

Data collection took place between February and October 2012 and was coordinated from each country office. We conducted a total of 36 FGDs, with 265 total participants, and 164 IDIs, with varied samples that loosely represented the categories outlined in Table 1 (see Box 1 for descriptions of interviews conducted in each country).

Members of the cross-country PRIME research team developed a collection of questions for IDI and FGD guides, which were then adapted at the country level and used in focus group discussions and semi-structured interviews. Interviewers were free to probe further following responses to specific questions if they felt further enquiry could yield new information on the theme at hand. The interview guides are publically available on the PRIME website. The core questions covered the following domains: 1) detection and/or identification of people with mental illness, access to care, and pathways to care; 2) delivery; 3) recovery; 4) accountability; and 5) stakeholder views on mental health and research uptake (directed

at policy-makers and health care providers). Questions were adapted in relation to 1) the type of respondent (such as service user versus PHC provider); 2) the country context; and 3) whether the respondent dealt with depression, psychosis, alcohol use, or epilepsy.

2.2. Data collection

Methods conducted across study sites were largely congruent. Purposive and snowball sampling methods were applied across the five study sites to ensure all stakeholder perspectives were obtained. All IDIs and FGDs were audio-taped, transcribed into the local language, and translated into English, with quality checks from research assistants at each study site. Interviews were conducted in a private space, such as a home (e.g., CHWs), clinic (e.g., service users), or workplace (e.g., PHC workers and policy-makers). Minor modifications did exist, such as in Ethiopia, where the study co-investigators discussed the emerging findings after each field site visit, in order to allow iterative development of the topic guide, and in South Africa, where service user—participants with depression and schizophrenia were recruited from health facilities and a screening tool was administered to identify service users with depression.

2.3. Data analysis

Data analysis was first conducted at the country-level in order to examine major themes that emerged around acceptability and feasibility of task-sharing mental health services, using a Framework Analysis approach (Lacey and Luff, 2001). The topic guide questions formed an *a priori* coding framework for the acceptability and feasibility of task sharing that attended to the domains of ‘Demand and Access’ and ‘Delivery and Recovery’. Additional codes were added, such as ‘safety’ and ‘quality’ to accommodate variation with regard to each study site. Qualitative software used for analysis included Atlas.TI (Ethiopia), NVivo 9.0 (India, Nepal, and South Africa), and systematic hand-coding (Uganda).

For the present study we conducted a secondary analysis of country-level data to explore contextual factors that shaped stakeholder perceptions of acceptability and feasibility. First, we examined perceptions on the acceptability of task-sharing mental health services (Table 2); in some cases emergent themes cut across all sectors of the health workforce and others specified a specific type of health worker for which a shared task was acceptable or not. Second, we examined perceptions on the feasibility of task-sharing mental health services at multiple levels of the health workforce (Table 3). In both cases, we demonstrate in which contexts the emergent themes were relevant and present exemplar

Box 1

Description of Interviews in Context

- **Ethiopia:** *Sodo district, Guraje Zone, is 90% rural with a population of 161,952, with 187 people per square kilometer. Literacy is around 22% and there are fewer than four ethnic groups residing and languages spoken in this area; people are predominantly Christian. Undernutrition and reproductive health are leading health concerns (Hanlon et al. 2014).*

Two FGDs were conducted with PHC health workers, one with PHC supervisors, one with CHWs, one with families of people with mental illnesses, one with representatives of a community-based network of health education volunteers, and one with local community leaders. Fourteen IDIs were conducted with community leaders, religious leaders, holy water priests, traditional healers, NGO representatives, service coordinators, policy-makers and planners.

- **India:** *Sehore District, Madhya Pradesh state, is 81% rural with a population of 1,311,008, with 199 people per square kilometer. Literacy is around 71% and there is one ethnic group and one language spoken in this area; people are predominantly Hindu and Muslim but some are Christian and Sikh. Infant and maternal mortality, family planning, and communicable diseases are the leading health concerns (Hanlon et al. 2014).*

Four FGDs were conducted in two different blocks of the district: two FGDs were with paramedical PHC staff, including multi-purpose workers, pharmacists, Auxiliary Nurse Midwives, and Anganwadi workers, and two were conducted with mixed-gender community members. Eleven IDIs were conducted with medical officers and policy-makers.

- **Nepal:** *Chitwan district is 73% rural with a population of 575,058, with 259 people per square kilometer. Literacy is around 70% and there are fewer than nine ethnic groups and eight languages spoken in the area; around seven religions are practiced. Dengue outbreaks and post-conflict health are the leading health concerns (Hanlon et al. 2014).*

Three FGDs were conducted with community members, including community leaders such as teachers and political leaders, two with CHW volunteers, and four with PHC workers, including Auxiliary Nurse Midwives, Certified Medical Assistants. The IDIs were conducted across the five groups, with the most interviews conducted in the PHC with Auxiliary Nurse Midwives, psychologists, and health workers.

- **South Africa:** *Dr. Kenneth Kaunda district, North West Province, is 14% rural with a population of 632,790, with 55 people per square kilometer. Literacy is around 88% and there are fewer than four ethnic groups and languages spoken in the area; people are predominantly Christian. High burden of infectious chronic diseases (HIV and tuberculosis) and concomitant rising burden of NCDs are the leading health concerns (Hanlon et al. 2014).*

Four FGDs were conducted with lay counselors and one with PHC clinic managers. The majority of data from South Africa was IDIs: eleven with PHC professional nurses, seven with mental health care providers (including NGOs), ten with health care organizational staff, three with auxiliary social workers, 23 women with maternal depression, 20 HIV+ people diagnosed with depression, ten people diagnosed with schizophrenia, and ten caregivers of people diagnosed with schizophrenia.

- **Uganda (Kamuli district):** *Kamuli district is 97% rural with a population of 740,700, with 222 people per square kilometer. Literacy is around 63% and there are fewer than four ethnic groups and three languages spoken in this area; most people are either Christian or Muslim. Increasing burden of NCDs is the leading health concern (Hanlon et al. 2014).*

Four FGDs were conducted with community members, two with service users, including users and their carers, four with CHWs, and two with PHC workers. IDIs were conducted exclusively with district health managers, health facility managers, and policy makers.

quotes from data analyzed at the country-level to show nuances in the shared and divergent themes.

3. Results**3.1. Views on acceptability of task-sharing mental health services**

There were many shared views among stakeholders, including community members, service users, caregivers, CHWs, PHC workers, mental health specialists, and policy makers, on what made task-sharing acceptable (Table 2). We organized these themes accordingly to highlight what made participants perceive task-sharing to be acceptable (benefits) and what systemic, social, and educational challenges served as barriers to the acceptability of task-sharing mental health care.

3.2. Benefits

Study participants commonly perceived task-sharing as an innovative way to enhance access to mental health services, marrying community needs with health workers' capabilities. The current deficit of mental health services and utility of task-sharing

was described by a person in charge of a Health Post from Nepal (FGD):

"As the patients of mental illness require follow-up and long term treatment, they have to return from the health centers without medicine if they come on the days when the health workers are not present and so there will be treatment gap. They might not be cured. Therefore, the impact of our program may be negative. Therefore, the Primary Health Center and Health Post should be responsible for clinical treatments while the Sub-Health Post can be responsible for training and follow-up of the patients."

Increasing access to mental health services was reported as an important benefit of task-sharing across all sites (Table 2), and something that was urgently needed, as described by a female health assistant (IDI, Nepal):

"It is possible to put it into practice and it is already too late. The state should include mental health in the basic essential primary health service. Fifty percent of the total cases in PHC are related to mental health."

Most sites also reported that saving time and money and reducing disparities were benefits of task-sharing mental health

Table 2

Cross-cutting themes for acceptability of task-sharing mental health care.

	Ethiopia	India	Nepal	South Africa	Uganda
<i>Benefits</i>					
Increase access	X	X	X	X	X
Identify local leaders to work as CHWs (e.g., traditional and faith healers)	X	X	X	X	X
Save time	X	X	X		X
Save money	X	X	X		X
Reduce disparities			X	X	X
Decrease stigma			X	X	
Prevent progression of disease		X	X		
Improve medication adherence				X	X
<i>Systemic Challenges</i>					
Lack of infrastructure	X	X	X	X	X
Workload	X	X	X	X	X
Health workers will take on new roles but not get recognition for it			X	X	X
Confidentiality (space)			X	X	
CHWs reluctance to take on mental health care — risk of disappointing the community, extra burden, stigma	X				X
Clear division of labor necessary at each level of health care workforce			X		X
Support group intervention needs to be carried out by someone who understands illness and experience of users		X		X	
Preference for CHWs to provide counseling as nurses appear too busy				X	X
Health workers want to take on more roles than outlined in mental health plan			X		
Legal protection for workforce who have taken on new roles (e.g., health assistants who prescribe medication)			X		
<i>Social challenges</i>					
Belief CHWs should be only involved in identification, counseling, monitoring of conditions, and referral	X	X	X	X	X
Lack of trust in government health services	X	X		X	X
Belief that CHWs may be unsafe due to aggressive or violent behavior of mentally ill patients	X	X	X		X
Belief physician is required to diagnose or treat mental illness	X		X		X
Belief health care workers will preference physical illness over mental illness			X	X	X
Lack of respect for CHWs who task-share mental health services			X		X
Belief that medical professionals lack empathy while dealing with mentally ill patients		X		X	X
<i>Educational challenges</i>					
Community lacks of knowledge around availability of effective biomedical care	X	X			X
CHWs will be unable to recognize people with mental illness who need treatment	X		X		X

services. At least two sites reported that decreasing stigma, preventing progression of mental illness, and improving medication adherence were also important benefits. Specifically, stigma can serve as a barrier to task sharing in several ways. For example if primary care workers had stigmatizing attitudes towards people with mental illness, it might make them more reluctant to take on mental health care duties as part of integrated primary care. Similarly, community members may not wish to share primary care clinic queues with people with mental illness, and might prefer to have them use specialist psychiatric hospital outpatient facilities.

Many respondents discussed other programs that have successfully task-shared health services to explain what made task-sharing acceptable. For example, the following female community health volunteer (IDI, Nepal) describes how access to medications was a common benefit of task-sharing:

“Before some years, many people used to die of pneumonia. Now we are prescribing medicine for pneumonia and we have been quite successful. So, we could also be successful in terms of treatment of mental health problems. So, it's not impossible in any sense.”

Every site indicated that locally-identified leaders, and specifically faith healers and traditional healers, may be incorporated into an already established structure of mental health service provision. For example, a female community health volunteer (FGD, Nepal) stated: “Mental health problems can be better addressed by experienced [lay] people rather than educated [medical] people.” Recognizing this existing social support system was seen as a benefit of task-sharing mental health care in most contexts, particularly when mental illnesses are viewed in local contexts to be part of “the spiritual world”. For example, a South African service user (IDI) described how important a traditional healer was in her ability to navigate biomedical treatment:

“His [traditional healer] name is Mr. Peter, he helped and the pills helped me too. When I left Witrand [psychiatric hospital] I was feeling much better and I went to the traditional healer who helped me to recover fully.”

A CHW in Uganda (FGD) suggested adopting the model of traditional birth attendants:

“They were not chased out of work, but instead were trained, provided with medicine and other necessities, and left in business, told to always refer cases early. Because this way in the rural setting, those people are still quite important. So, the best way would be by integration.”

3.3. Systemic, social, and educational challenges

Systemic, social, and educational challenges influenced stakeholders' perceptions of task-sharing mental health services (Table 2), as illustrated below by an Indian mental health services planner (IDI), in response to the question: What challenges did you perceive in the integration of mental health program in primary health care and maternal health care context?

“Lack of awareness among service providers and community are the biggest challenge in recent days. Our medical doctors like general physician and gynecologist do not have enough knowledge to identify the psychiatric problem. Secondly, social stigma is a barrier for seeking treatment for mental disorders in our society. The third challenge is the lack of health facilities. It is observed that the majority of the patients goes to faith healers (*jhaad-phoonk*) or similar places where treatment facility is available.”

Major systemic challenges included lack of infrastructure, workload, community preferences around who should work as

Table 3
Cross-Cutting themes for feasibility of task-sharing mental health services.

	Ethiopia	India	Nepal	South Africa	Uganda
<i>Logistical opportunities</i>					
Improve access by reducing transportation to health care facility (e.g., cost, distance)	X	X	X	X	X
Overcome human resources barriers, such as shortage of specialist human resources (psychiatrists, psychologists, clinical psychologists, and counselors)		X	X	X	X
Mental health care is not included in role or job chart of doctors		X	X		
<i>Logistical challenges</i>					
Deficit of medicine for psychiatric disorders	X	X	X		X
Multiple Projects Competing for Staff	X	X	X		X
Lack of required equipment to diagnose mental illnesses		X	X		X
Poor quality of services (e.g., doctors or medicines unavailable)	X	X			X
No space for private consultation			X	X	
Inadequate in-patient care facility at district level or below		X			
Need to match health worker and patient by gender		X	X		
Unattended health posts			X		X
<i>Availability of task-sharing workforce with mental health training</i>					
Shortage of CHWs		X	X	X	X
Shortage of PHC workers		X	X	X	X
Shortage of specialists		X	X	X	X
Need clearer division of labor across levels of mental health care workforce			X		X
Policy that contributes to staff turnover			X		
Personnel not located in places where medications and instruments are used			X		
<i>Competency to provide mental health care</i>					
CHWs' lack of competency		X	X	X	X
Staff nurses' lack of competency		X	X	X	X
Medical officers' lack of competency		X	X		
Specialists' and gynecologists' lack of competency		X	X		
<i>Workload</i>					
Insufficient staff/too much workload	X	X	X	X	X
Too much work for CHWs	X	X	X	X	X
Too much work for PHC workers	X	X		X	X
Too much work for supervisors					X
New cadre of health worker (nurse-level) should be trained to provide mental health services			X		
Government should hire specialists to focus on mental health care only			X		
<i>Training</i>					
More training needed	X	X	X	X	X
All levels of health professionals should receive training (rather than training one person who trains the rest)	X	X	X		X
Trainers should have practical experience (e.g., nurses, psychologists, or social workers—not necessarily physicians)	X	X	X		X
Training should be hands-on	X	X	X		
Distance learning should be part of training, using multi-media component			X		X
Training evaluation should include pre- and post-test to measure learning			X		X
Refresher training every 3–4 months			X		X
Medical officer or other training personnel needed at the district level		X			
Training should not be focused on physicians because they change posts frequently			X		
<i>Supervision</i>					
Need more “supportive supervision”	X	X	X		X
Supervisors must be adequately trained and qualified to provide supervision		X	X		X
Supervisors need to be accountable for providing supervision			X		
Supervision should be more frequent			X		
Need more “peer supervision”			X		
Lack of provision of necessary psychoeducation by doctors and nurses				X	
<i>Compensation</i>					
Need to compensate task-shifted workforce for training	X	X	X	X	X
Need to compensate CHWs for delivery of services	X	X	X	X	X
Need to compensate supervisors for supervision	X		X		X

CHWs, lack of recognition for taking on new roles, and confidentiality. The following policy-maker (IDI) described the problem of lacking infrastructure for task-sharing mental health care in India:

“Currently, if any mental case is identified by the field level functionaries, they are being referred to sector PHC, which is not equipped as of today. Eighty percent of mental cases may be treated with the medicines through the [out-patient] facility while 20 percent cases might require any equipment to confirm the diagnosis.”

Another Indian policy-maker (IDI) emphasized the challenge of workload:

“Even doctors are currently overburdened with the present responsibilities and they might feel that [task-sharing] is an

additional responsibility being given to them. Other than medical officers, if you feel that multi-purpose workers would be able to carry forward this plan alone then it is not possible as they are not capable to do their own work.”

Social and educational factors also posed challenges to the acceptability of task-sharing mental health care. Many shared a view that CHWs should only be involved in identification, counseling, monitoring of conditions, and referral for people with mental illness due to their limited training. Some feared CHWs would be unable to recognize people with mental illness who needed treatment and many believed they could be unsafe working with the mentally ill. PHC workers also worried that CHWs might fail to deliver mental health care adequately without enough support. For example, the following Ethiopian PHC worker (FGD)

suggests that perceived inability to provide sufficient care at the community level might hinder CHW interest in taking on mental health care tasks:

“Though we are expected to get training there might be a risk of mismanagement. For example if one fails to refer patients whom he/she is not able to treat, this might affect both the patient and the community. [...] Failure to treat one patient will reduce the trust of the community about our service.”

Such contextually-mediated barriers to task-sharing demonstrate why local research is necessary before initiating a task-sharing mental health program and how detection of mental illness might be improved through culturally acceptable approaches.

3.4. Views on the feasibility of task-sharing mental health services

Table 3 outlines seven categories that the study participants identified regarding the feasibility of task-sharing mental health care. First, stakeholders described logistical opportunities and challenges that may affect the feasibility of task-sharing. Second, health workers frequently cited that task-sharing would be feasible because there were too few specialists to carry out mental health care in rural areas. However, logistical challenges, such as overburdening staff workload, unclearly defined roles, and private spaces for mental health consultation, were underlying concerns expressed across the five study sites. Third, availability and competency of human resources across the health system – from the community to primary care and even specialist levels – were fundamental concerns. Finally, stakeholders identified workload, training, supervision, and compensation of community and PHC-level workers as key areas that must be elevated in order to make task-sharing feasible.

3.5. Logistical challenges and opportunities for task-sharing

One of the most significant barriers to feasibility of delivering mental health services was transportation to a health facility. There was a strong belief by both service users and service providers that bringing mental health care to rural areas through task-sharing could help overcome transportation-related access problems (Table 3), as described by a Nepali auxiliary nurse midwife (FGD):

“Women, who have been hiding their problems, could receive the treatment. They do not have to travel long distance but can get the services nearby. It would lower their cost, they do not have to stay depressed, and ultimately, the patients would not be compelled to commit suicide.”

Similarly, a community member in Uganda (FGD) emphasized how task-sharing can help overcome other logistical barriers such as time, money, and transport:

“That would save us time, and even money; instead of taking the patient all the way to Butabika, we just come to our nearby hospital.”

Yet, fear of workload overburden among PHC workers was an often-cited barrier to task-sharing, as described by one Ugandan PHC worker (FGD):

“Sometimes you have few health workers in a health facility and you want them to improve the lives of these people. That means extra work for them. So, you find that if they are extremely busy,

it can be a limitation. You train someone but he/she does not have time for these mentally ill patients.”

Nevertheless, a Senior Auxiliary Health Worker in Nepal (FGD) described the need for more training about mental illness and additional human resources to provide time to deliver mental health care at the community level:

“Nothing will happen by providing us training and giving us stipend money. We received so many of those stipend money ... but what has changed? What will happen if I can identify the problem? If I cannot take out time from my schedule, what is the use of me knowing about it? After introducing such programs, human resources should be added.”

Often study participants described feasibility issues with the current system that made mental health services delivery difficult, such workload burden of specialists, issues of space, and transportation issues. At the same time, these participants described how these key logistical challenges could be overcome by task-sharing mental health care. This point was highlighted by an Ethiopian PHC worker (FGD):

“Mental illness is a serious health problem. Once the professional took the training and began to provide the service, it is very crucial to ensure adherence and follow up. This is a challenge that can add to the existing workload. For example our health centers might be far away from the neighborhood from where our clients came from. Due to this they might miss follow-ups. The other example is we might also face shortage of medications. When patients come to us what shall we do? Or some patients may need observation for some time. There is no prepared space for that. These are some of the examples of the impact or challenges of providing the service.”

Training non-specialist health personnel, from CHWs to medical officers, was seen as a major challenge for feasibility of task-sharing mental health services (Table 3). This problem was underscored by the strong view from all sites that specialists must be available for training and supervision of CHW and PHC workers. At the same time, all study sites indicated that the workload of health personnel from the community- to specialist-levels was excessive.

There was agreement across study sites that more training was needed across all levels of health professionals (rather than training one person who trains the rest). A health assistant from Nepal described this (FGD):

“For our capacity enhancement and for future reference, training should be at least of one month long with certificate so that it would be of value in future. We also feel proud to tell others that we had attended such type of training if we are to go somewhere.”

Moreover, they emphasized that trainers should not only be sufficiently trained but also have practical experience, such as nurses, psychologists, or social workers. However, they indicated that some specialists (e.g., psychiatrists) might not be the best trainers because they may not have worked at the community-level and therefore might not understand community-level challenges. In some settings, psychiatrists also change posts frequently so specialists as trainers might fail to provide continuity with non-specialists. In addition, many respondents believed that training should be hands-on and refresher training should be recurrent.

The need for consistent supportive supervision was also an important theme, underscored by a PHC worker from Ethiopia (FGD):

"Supervision is a must. Once the training is completed, someone needs to supervise the extent to which skills obtained from the training are being implemented in the practical setting. Some guidance also needs to be given on how challenges that emerge during practice need to be addressed. [...] I don't think a time frame should be put in place [for supervision]. We need what you call ongoing support. For example, the supervisor may look at the records we keep here and come across some errors. He may be able to tell us what improvements to make right there and then. They can help us examine cases and guide us on how to write up the records. [...] Supervision is a continuous process that is conducted in an on-going manner. Supportive supervision is not like evaluation that terminates at a specified time."

Alongside supervision, compensation for training of new tasks and delivery of mental health services was emphasized as a necessary step for improving task-sharing mental health services.

4. Discussion

This study provides new insights into the acceptability and feasibility of task-sharing mental health care and points to important avenues for further research and evaluation as these programs roll out. First, our analysis of stakeholder perceptions suggest that the following conditions are important basic requirements for task-sharing across contexts: increased numbers of human resources and improved access to medications; adequate training, support, and compensation for health workers who take on new mental health tasks; and ongoing structured supportive supervision at community and primary health care levels. Second, our data build upon previous studies (Padmanathan and DeSilva, 2013) that emphasize systemic issues as fundamental barriers to task-sharing, including overburdening health workers, adequate training and supervision, remuneration, and integration of mental health care tasks into existing health systems. Finally, stakeholders illuminated meaningful contextual differences that shape the acceptability and feasibility of task-sharing and bring to light considerable gaps in discourse around task-sharing mental health care that warrant attention. In what follows we discuss some of the key issues and opportunities that emerged across the five country sites and therefore should be considered when designing task-sharing mental health service delivery plans at the community and primary care levels.

There was some disagreement around who should provide mental health training to non-specialist health workers across cultural contexts. In some countries specialists were preferred for their expertise while in other contexts they were not perceived as suitable trainers due to their limited experience in community or PHC settings. Rather, recognizable people who had elevated trust among health personnel by demonstrating their clinical and/or community work on mental health issues were identified as those who should provide training. There was some concern in Ethiopia that those with advanced training may leave state-run health posts to work for NGOs. This brought to light some of the local factors that may affect the long-term integration of mental health care in some contexts, such as retaining health workers who have completed mental health trainings (see WHO, 2005). However, there was general consensus that training should be ongoing and health workers should be recognized for achieving certain levels of training, thereby boosting their confidence and knowledge about caring for people living with mental illness.

There was large agreement that task-sharing roles must be clearly defined and adhered to across the health system. Not clearly defining what needs to be performed by which health cadres has

become a major barrier for determining what training and supervision should be provided, especially among community and PHC workers who already are overburdened with tasks (WHO and the World Organization of Family Doctors, 2008). Defining tasks can lead specialists and trainers to determine the competencies that should be focused on during training sessions, which also can be indicators for supportive supervision and may differ based on sociocultural context. Moreover, ensuring that non-specialists stay in the health system is crucial to build up the mental health workforce. The WHO Human Resources for Mental Health module (2005) suggests that retention can be achieved by improving remuneration, developing jobs that meet the needs of categories of workers, providing ongoing training and support, improving social ties and morale among staff, and hiring people who have established ties with and confidence of the community (WHO, 2005).

Stakeholders were concerned that access to facilities with mental health services (e.g., transport) and overburdening the health workforce with mental health services may make task-sharing unfeasible. This brings to light not only important systemic barriers that may impede task-sharing but also opportunities to overcome them. One solution may be to implement a tele-psychiatry model, such as those implemented in India where limited health care infrastructure exists (Thara and Sujit, 2013). Applying this to PRIME settings may contribute to prudent gains in reducing stigma by providing treatment at the community level, particularly in rural areas. However, this idea was not tested with stakeholders in the interviews, and would require further testing in other settings.

Stakeholders discussed the distribution of medication as an important task to be shared at the community and primary care levels more frequently than social or psychotherapeutic interventions. Some mentioned that CHWs may be suitable for carrying out support groups for people living with mental illness – although there was also concern for CHWs who are already overburdened with work responsibilities (see Maes et al., 2010). Respondents from other related studies communicated understandable reasons for not prioritizing psychotherapeutic interventions; for example, in Ethiopia a respondent exclaimed: "You can't put words on top of a donkey!" It may be that the bias toward medications results from the fact that psychotherapy and behavioral interventions have not yet been recognized by those working within or benefiting from the systems of care in these settings, although they remain key elements of the PRIME mental health care plans, which are in the process of being implemented, and are not yet evaluated.

Finally, in all settings people apart from the non-specialist health workers, such as religious leaders, faith healers, traditional healers, and other lay people, were preferred to non-specialist health workers, such as CHWs, to carry out the tasks of detecting people with mental illness at the community level. This finding builds on a debate about who should appoint CHWs, such as the health ministry or communities themselves (Lancet Global Mental Health Group, 2007). It also may reveal a bias, where biomedical providers and well-educated individuals commonly perceive that people choose traditional healers for mental illness because it fits their existing explanatory models, when, in reality, people draw from a combination of providers until they find something that works (Khoury et al., 2012). In the present study there was some concern with CHWs taking the lead at the community-level when already established cultural brokers for mental health might be more suited for the job. There is some evidence that traditional healers and religious advisors may play an important role as cultural brokers in mental health care delivery in South Africa among specific ethnic groups (Sorsdahl et al., 2009). However, there is very little evidence for effectiveness of traditional healers and they are

not normally part of the formal health system in the PRIME countries. Indeed, there may be opportunities to explore a combined traditional model of healing with the biomedical model in order to mobilize mental health services in certain contexts. In depth formative research in specific settings is needed to explore the most appropriate intersections between traditional and biomedical systems of care.

There are several limitations to this study. First, this was a preliminary study conducted before participants had been involved in delivering or receiving mental health services delivered through task-sharing. Further research is required to assess these opinions once the PRIME mental health care plans have been implemented in the country sites. Second, variation in what questions were focused on and sampling at each study site shaped whose voices were evaluated and therefore presented in these analyses. However, due to the size of the study and geographic distribution of study settings, this limitation was difficult to resolve. Even more, despite triangulating multiple data sources, including IDIs, our utilization of FGD data may marginalize minority views. Third, this study stemmed from a secondary analysis of the data examined at the country level; therefore, some variation in coders and thematic focus may have affected the themes that emerged at the country level. Nevertheless, the systematic comparison across country sites with coauthors contributing to the comparative analysis also provides a unique perspective and strength to the study that is missing from previous studies that focus on one specific context.

Our study provides new insight into what factors are perceived to make task-sharing mental health services acceptable and feasible in LMICs and these findings might inform mental health researchers as well as policy makers and service providers in these settings. The research clearly demonstrates that mental health programs should conduct adequate formative research when integrating mental health interventions into a new context, particularly when they are translating research from one locality to another (Patel et al., 2011). This approach is particularly important to identify with whom mental health care tasks should be shared and will ensure a more culturally relevant intervention that is more likely to have a positive effect and uptake in the community. Moreover, once implemented these approaches should be tested rigorously in order to evaluate the effectiveness of task-sharing in primary care settings and to identify benefits and challenges associated with tasks shared. Nevertheless, the WHO mhGAP programme makes it very clear that in addition to training non-specialists to task-share mental health services, we need to advocate for expansion of the specialist mental health workforce to make task-sharing feasible (WHO, 2010). Recommendations emerging from this study regarding implementing a task-sharing approach are contingent on Ministries of Health also investing in the training of mental health specialists to provide supervision, support, and referral pathways. By recognizing the systemic challenges and socio-cultural nuances that may influence task-sharing mental health care, interventions can be more easily planned to provide mental health care in resource-constrained settings and to improve the mental health of vulnerable populations.

Funding

This paper was produced as part of the Programme for Improving Mental health care (PRIME) funded by UK Aid from the UK Government. However, the views expressed do not necessarily reflect the UK Government's official policies. Mary De Silva is supported by a Wellcome Trust/LSHTM Career Fellowship. Vikram Patel is supported by a Wellcome Trust Senior Research Fellowship in Tropical Medicine. The funders had no role in study design, data

collection and analysis, decision to publish, or preparation of the manuscript.

Conflict of interest

None.

Acknowledgments

We would like to thank the large network of contributors to the PRIME programme, including collaborators, research assistants, and research participants. A special thank you to Tasneem Kathree, Carrie Brooke-Sumner, and One Selohilwe in South Africa for the collection and primary analysis of the South African data; Anup Adhikari, Natassia Brennmann and Anna Fiskin for their collection and/or primary analysis on the Nepal data; Vaibhav Murhar and Sanjay Shrivastava for their work on the India data; and to Medhin Selamu and Maji Hailemariam for the collection and primary analysis of the Ethiopia data.

Appendix A. Supplementary data

Supplementary data related to this article can be found at <http://dx.doi.org/10.1016/j.socscimed.2014.07.057>.

References

- Alem, A., Kebede, D., Fekadu, A., Shibye, T., Fekadu, D., Beyero, T., Kullgren, G., 2009. Clinical course and outcome of schizophrenia in a predominantly treatment naïve cohort in Ethiopia. *Schizophr. Bull.* 35, 646–654.
- Araya, R., Rojas, G., Fritsch, R., Gaete, J., Rojas, M., Simon, G., Peters, T.J., 2003. Treating depression in primary care in low-income women in Santiago, Chile: a randomised controlled trial. *Lancet* 361 (9362), 995–1000.
- Hanlon, C., Luitel, N., Kathree, T., Murhar, V., Shrivastava, S., Medhin, G., Prince, M., 2014. Challenges and opportunities for implementing integrated mental health care: a district level situation analysis from five low- and middle-income countries. *PLoS One* 9 (2), e88437.
- Jordans, M.J.D., Luitel, N.P., Tomlinson, M., Komproe, I.H., 2013. Setting priorities for mental health care in Nepal: a formative study. *BMC Psychiatry* 13 (1), 332–340.
- Kakuma, R., Minas, H., van Ginneken, N., Dal Poz, M.R., Desiraju, K., Morris, J.E., Scheffler, R.M., 2011. Human resources for mental health care: current situation and strategies for action. *Lancet* 378 (9803), 1654–1663.
- Khoury, N.M., Kaiser, B.N., Keys, H.M., Brewster, A.R., Kohrt, B.A., 2012. Explanatory models and mental health treatment: is voodoo an obstacle to psychiatric treatment in rural Haiti? *Cult. Med. Psychiat.* 36 (2), 514–534.
- Kohn, R., Saxena, S., Levav, I., Saraceno, B., 2004. The treatment gap in mental health care. *Bull. World Health Organ.* 82, 858–866.
- Lacey, N., Luff, D., 2001. *Trent Focus for Research and Development in Primary Health Care: an Introduction to Qualitative Data Analysis*. Trent Focus Group, Sheffield, UK.
- Lancet Global Mental Health Group, 2007. Scale up services for mental disorders: a call for action. *Lancet* 370, 1241–1252.
- Lund, Crick, Tomlinson, Mark, De Silva, Mary, Fekadu, Abebaw, Shidhaye, Rahul, Jordans, Mark, Patel, Vikram, 2012. PRIME: a programme to reduce the treatment gap for mental disorders in five low- and middle-income countries. *PLoS Med.* 9 (12), e1001359.
- Maes, Kenneth C., Kohrt, Brandon A., Closser, Svea, 2010. Culture, status and context in community health worker pay: pitfalls and opportunities for policy research. A commentary on Glenton et al. (2010). *Soc. Sci. Med.* 71 (8), 1375–1378.
- Mathers, C.D., Loncar, D., 2006. Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Med.* 3, e442.
- Murray, Christopher J.L., Vos, Theo, Lozano, Rafael, Naghavi, Mohsen, Flaxman, Abraham D., Michaud, Catherine, et al., 2012. Disability-adjusted life years (DALYs) for 291 diseases and injuries in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet* 380, 2197–2223.
- Padmanathan, Prianka, DeSilva, Mary, 2013. The acceptability and feasibility of task-sharing for mental healthcare in low- and middle-income countries: a systematic review. *Soc. Sci. Med.* 97, 82–86.
- Patel, V., Araya, R., Chatterjee, S., Chisholm, D., Cohen, A., De Silva, M., et al., 2007. Treatment and prevention of mental disorders in low-income and middle-income countries. *Lancet* 370, 991–1005.
- Patel, V., 2009. The future of psychiatry in low- and middle-income countries. *Psychol. Med.* 39 (11), 1759–1762.

- Patel, V., Chowdhary, N., Rahman, A., Verdeli, H., 2011. Improving access to psychological treatments: lessons from developing countries. *Behav. Res. Ther.* 49, 523–528.
- Pereira, B., Andrew, G., Pednekar, S., Kirkwood, B.R., Patel, V., 2011. The integration of the treatment for common mental disorders in primary care: experiences of health care providers in the MANAS trial in Goa, India. *Int. J. Ment. Health Syst.* 5.
- Petersen, I., Lund, C., Stein, D.J., 2011. Optimizing mental health services in low-income and middle-income countries. *Curr. Opin. Psychiatry* 24, 318–323.
- Prince, Martin, Patel, Vikram, Saxena, Shekhar, Maj, Mario, Maselko, Joanna, Phillips, Michael R., Rahman, Atif, 2007. No health without mental health. *Lancet* 370 (9590), 859–877.
- Rahman, A., 2007. Challenges and opportunities in developing a psychological intervention for perinatal depression in rural Pakistan – a multi-method study. *Arch. Women's Ment. Health* 10, 211–219.
- Sorsdahl, Katherine, Stein, Dan J., Grimsrud, Anna, Seedat, Soraya, Flisher, Alan J., Williams, David R., Myer, Landon, 2009. Traditional healers in the treatment of common mental disorders in South Africa. *J. Nerv. Ment. Dis.* 197 (6), 434–441.
- Thara, R., Sujit, J., 2013. Mobile telepsychiatry in India. *World Psychiatry* 12 (1), 84.
- van Ginneken, N., Tharyan, P., Lewin, S., Rao, G.N., Meera, S.M., Pian, J., Patel, V., 2013. Non-specialist health worker interventions for the care of mental, neurological and substance-abuse disorders in low- and middle-income countries. *Cochrane Database Syst. Rev.* 11, CD009149.
- WHO, 2005. Human Resources and Training in Mental Health Mental Health Policy and Service Guidance Package. World Health Organization, Geneva.
- WHO, 2010. mhGAP Intervention Guide for Mental, Neurological and Substance Use Disorders in Non-specialized Health Settings: Mental Health Gap Action Programme (mhGAP). World Health Organization, Geneva.
- WHO and the World Organization of Family Doctors, 2008. Integrating Mental Health into Primary Care: A Global Perspective. WHO, Geneva.