STRATEGIES AND CHALLENGES IN THE PROVISION OF HEALTH SERVICES IN CONTEXT OF HEALTH SERVICE PROVIDERS’ SHORTAGE IN TANZANIA: A QUALITATIVE STUDY

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ABSTRACT
This study aimed to assess perceptions on the shortage of health service providers, strategies of coping with shortage of health service providers and implications of the strategies of used in coping with shortage of health service providers. Semi-structured interviews were held with the regional and district AIDS Coordinators, Medical Officers, Health Secretaries, as well as in-charges of health facilities in five regions of Tanzania. Data analysis followed principles of open coding. The shortage of health service providers was described to be a huge problem. Service providers are compelled to ask the patients to wait for some hours, make priorities of the day and thus allocating health workers to the neediest areas and to the critical health conditions, providing services as quick as possible. However, it was reported that specializing in some units is likely to magnify the problem of health service providers’ shortage. Recommendations to improve the situation of health service providers included continuing employing health workers and making sure that employment is based on kinds of available in the job market. Shortage of health service providers results into a heavy burden among service providers and affect the quality of health services.

Key words: health service providers, human resources, shortage, Tanzania.

INTRODUCTION
Shortage of health service providers is the most pressing problem of health systems especially in the low-income countries as it threatens the quality of health services (WHO, 2006; Mæstad, 2006; Travis et al 2004; Rowe et al 2005). Equally serious concerns exist about the quality and productivity of the health workforce in low income countries (Hongoro and McPake, 2004). The health sector particularly in developing countries including Tanzania has continuously been facing an accumulation of challenges such as insufficient opportunities to train health care professionals, uneven distribution of health services (Munga and Mæstad, 2009), low pay for health workers (Leshabari et al. 2008), inappropriate physical infrastructure, poor management and difficult working or living conditions (Munga and Mæstad, 2009). HIV and AIDS pandemic, brain drain of health workers from poor countries and lack of investment in human resources for health in the wake of structural adjustment programmes have all contributed significantly to the overall shortage of HRH in sub-Saharan Africa (Gerein et al. 2006; Mæstad, 2006; Hagopian et al., 2004) both by international standards and relative to national staffing norms.
Tanzania, like most developing countries, is highly constrained in health service providers as the burden of disease has significantly increased health service providers workload. In addition local and international governmental and non-governmental agencies and Programs involved in the research and implementation of health interventions, continue to take away staff from traditional health service delivery. As such, the current health service providers Strategic Plan 2007-2012 reports that Tanzania has a 61.7% shortfall in staffing against established posts in health facilities and district health systems. The situation is worse for lower level health facilities, dispensaries (65.6%) and health centers (71.6%).

While the relationship between staffing levels and other human resources issues such as access to services has been studied (see for example, Gerein et al. 2006), there is paucity of studies that address strategies used by health service providers to cope with the heavy burden of service in context of health service providers’ shortage. Likewise, little published research from sub-Saharan Africa exists on the effects of staff shortages on the quality of health care.

Therefore, this study described the shortage of health service providers, perceived causes of health service providers’ shortage, challenges in recruiting health service providers, strategies of coping with shortage of health service providers, implications of the strategies of coping with shortage of health service providers, and recommendations in relation to shortage of health service providers.

METHODS
Qualitative research was employed strategically due to its inquiry paradigm. As such, qualitative research was useful in understanding studied phenomena (global health funding in this case) in context-specific settings (Hoepfl, 1997; Kvåle, 1996).

Study participants were selected purposively so as we sought to get information-rich cases (Hoepfl, 1997). Accordingly, a minimum of five exit clients were selected from PMTCT, CTC, VCT and reproductive health services on the day of interview. Identified potential study participants were asked to give their consent, all of them did. These were interviewed in a pre-arranged private and comfortable room located in the respective health facility. Likewise, five interviews were held with the District AIDS Coordinator (DAC), District Medical Officer (DMO) for rural districts and three (3) interviews among those in charge of health facilities in rural areas.

Data collection involved interviews that were performed individually (Kvale, 1996; Morgan, 1988). Semi-structured interviews were used so that the interviewer was free to probe and explore different aspects of the study (Bogdan and Biklen, 1982; Kvale, 1996). It was deemed important to use the guide so as to ensure that the same information was obtained from participants, good use of limited interview time; making interviews systematic and comprehensive; and for keeping interactions focused (Hoepfl, 1997).

Qualitative data analysis followed principles of open coding in which elaborate coding were developed in the analysis, hence the categories emerge from close reading and analysis. As Bogdan and Biklen (1982, p.145) illustrate, qualitative data involves "working with data, organizing it, breaking it into manageable units, synthesizing it, searching for patterns, discovering what is important and what is to be learned, and deciding what you will tell others". Considering this notion, transcribed texts were coded, categorized and grouped into themes and ultimately presented in form of summary of narratives and verbatim quotes to capture information.

RESULTS
Description of health service providers’ shortage:

The scarcity for health workers is recognized as a huge problem particularly at the lower levels of health facilities and in hard to reach localities as reported by a health manager in one of the districts.

"Shortage of staff is a crisis which consists of a wide range of issues. Health centers that are in the remote areas most of the times have one, two or three workers" (Health manager, district level).

Another informant had similar views regarding the magnitude of the problem of health service provider’s shortage, but described more that the burden was heavy on the side of health providers. He said:
“The scarcity for the servants is a huge problem especially at the rank of the health care providers at the health centers; you may find a person doing more work than he/she is supposed to. They are attending to many patients more than he/she is supposed to be, therefore on that side it is still a huge problem. We don’t have sufficient number of people, there are so many patients and the health care providers are scarce. So you can imagine the burden” (Health manager, district level).

During the interviews, it came out clearly that the workload burden was made worse by the fact that skilled health workers are few and a lot of support workers are not trained to provide health services. A health manager in one of the regions was quoted saying:

“You may see a large number of employees, .... about 400 in a district but among them you will find 200 attendants plus labourer so if you calculate you find that 50% are unskilled labors therefore skilled workers are few. Though you will see a lot of employees but in reality they are not trained” (Health manager, regional level).

Perceived causes of HRH shortage:

Regarding the causes of HRH shortage, one of the health managers at the district level explained about the way the districts communicate with the Ministry in search of health workers’ employment but only a small proportion of the required number is obtained. The informant had this to say:

“The Municipal officials write a report stating the number of staff required to fill in the gap; this draft is then taken to the human resource department at the Ministry of Health and Social Welfare. However, of those requested few may be obtained. For example, the demand can be 100 staff but only 20 staff can be posted to the area” (Health manager, district level).

Similarly, another health manager narrated that the dynamics of employment of health workers at the district level depends on those who are available i.e. those who are trained by the health training institutions. One of the informants reported:

“We recruit health workers and post them at work place depending on their availability in the market. If there are no workers to recruit we remain with the same number of staff” (Health manager, district level).

It was also reported that specializing in specific clinical fields was likely to magnify the problem. In the context of shortage, there was deemed a need to train health workers who can offer health services in various units as reported by a service provider in one of the hospitals:

“Other staff went to specialize in different medical fields, for example, some went to specialize on counselling. So when people come for HIV/AIDS testing they meet the counsellor (nurse). Nurses who have specialized in counselling are usually stationed in the counselling section and cannot perform other nursing duties because they are employed as counsellors to perform only counselling duties. For example, if you are a midwife nurse you are stationed at the labour ward, you cannot be stationed at the counselling section. This is what causes shortage of staff, it could be better if for example a nurse who has specialized in counselling can also be multipurpose so that when emergences happen she or he can perform other duties in other units such as the labour ward, injection and others” (Health service provider, hospital).

Another informant was of the view that some of health workers leave the job and shift to another working areas and thus increase the shortage. He narrated this:

“Also the health workers resign and join other professions and thus causing an increased problem of shortage of health workers” (Health manager, district level).

One of informants realized that shortage of health service providers was a big challenge that was multi-faceted in nature. He pointed out that:

“That is a challenge and I think now we have about 45% of the employees who are needed. Among the existing ones some will retire, some are likely to die, some have to go for further education, others have to go for their holiday or to fall sick, these are things you cannot argue about. Also, according to the human nature some have to shift and some drop out for reasons known to themselves” (Health manager, regional level).
Strategies for coping with shortage of health service providers

In the context of shortage of health service providers, the study sought to establish strategies used to cope with the heavy workload among health service providers. It was revealed that allocating multiple tasks to health service providers was one of the coping strategies as reported by a health service provider:

“We have tried to make efforts to address the shortages by allocating multiple tasks to each staff. For example, we can be only two staff on shift and patients who need health services are many, this does not mean that some patients should not be provided with services. Therefore, we make sure that all tasks are well allocated among the available health providers regardless of the number of patients. We make sure that at the end of the day the needs of all the patients are fulfilled” (Health service provider, hospital).

Another reported strategy was that of making priorities of the day by allocating health workers to the neediest areas as well as in areas where patients are in critical health conditions as reported by one of the health managers:

“First, we have to try and look at the existing staff gaps. One ward can be a lot busier than another, so we have to make priorities of the day. High priority is put in the labor ward, so we make sure that most nurses are allocated in those wards” (Health manager, district level).

This strategy was also reported at the dispensary level as one of the facility manager said:

“Sometimes there are people who wants to check for HIV, I usually ask them to come back another day… because I have so many patients with fever and I cannot leave someone with fever to attend someone wanting to know HIV status” (Facility manager, dispensary).

One of the strategies to cope with shortage of health service providers involves changing service norms. A typical case was cited from HIV counseling and testing services where standards of services are altered to cope with the inadequate number of counselors. While the norm is using person-centered counseling approach, in the context of health service providers’ shortage, the practice becomes that of group-counseling, as one of counselors pointed out:

“There is shortage of health workers but we overcome it by shortening the explanation because many people may have received education on AIDS and may be coming for the second time. We may also conduct group education after which we test them” (In-charge, counseling unit, hospital).

Use of retired service health service providers was revealed as one of the strategies to cope with the shortage of service providers. This was done specifically in areas where shortage of skilled providers was acute. Retired health workers are employed on a contract basis as one of the informants narrated:

“There are many ways to deal with it, for example, at the moment we have a plan for recruiting retired officers for professions that we think it is difficult to get them. We write a letter to the President’s public service management office who in turn request for a permit from the permanent secretary of the civil service department in the presidents’ office to allow us employ them under contract” (Health manager, regional level).

A similar strategy reported was that of employing staff from other countries to support provision of health services. Examples were depicted to authenticate the use of “expert” strategy:

“We normally get support of experts from abroad. For example, we currently have a paediatrician who is working under contract … we also have experts from abroad, there are two surgeons, one is Korean, and there is also one nurse from Korea” (Health manager, regional level).

Altruism came out clearly as one of the ways of coping with the shortage of health service providers. One of the service providers narrated during the interview that it is a professional obligation to provide services even when the work burden is heavy. He added:

“We keep on doing our job even when there are a lot of patients who need health services. We care a lot about providing services to our patients than payments. We cannot leave our work here just because we are not motivated. We continue doing our work very well” (Health service provider, health centre).
Another informant held similar views in that health service providers are committed to work regardless of the heavy workload that they confront. He said:

“Sincerely, we can say this job is a call therefore people are just volunteering, we don’t see if there is any problem because it is our responsibility and we know that. Therefore, we just arrange ourselves. For example, here at our place there is something we call double shift, even if a person had been at work since morning, if there is a shortage maybe a person has been excused from duties because of illness or has got an emergency then one has to continue for extra hours” (Health service provider, hospital).

**Perceived implications of the strategies of coping with shortage of health service providers**

The implication of allocating multiple tasks to few staff was that patients had to wait for a longer time, sometimes for hours, to get services. There was a sentiment from a village health committee member that when patients or clients are asked to wait when the health service provider is rendering services in another unit they tend to leave as they get discouraged.

“The number of staff does not meet the requirement because there is only one staff at the dispensary. For example, as a doctor one is supposed to attend patients and if a patient wants laboratory service he has to wait for the doctor. So one may have to wait until he gets tired and leaves” (Member, the village health committee).

Regarding the change of service norms, it was clearly indicated during the interviews that one cannot offer quality counseling in a context where he or she is tired after offering counseling to so many clients.

“Aaa! there is staff shortage and that is the biggest problem, even here at this section you might find you are alone ((laughing))...therefore you may conduct counseling to patients beyond your capacity on the same day since you cannot leave them. Therefore you counsel all of them, you get tired and you cannot offer quality counseling because the clients are so many. In a day you may get 30, 40, and you might be alone” (In-charge, counseling unit, hospital).

It was also perceived that strategies of coping with shortage of health service providers could jeopardize the quality of health services. One of the service providers admitted this:

“We just do what we can. Where we cannot, that is it. But we are trying to put ourselves together. It can however reach a point you fail and you don’t know what to do, the few available staff takes over but the work load is so much and you find there is a lot of work and is not done as needed you then rush so that the work gets done, but not up to the standards” (Health service provider, hospital).

**Recommendations in relation to shortage of health service providers**

Recommendations to reverse the shortage included increasing the number of health service providers so that they can share the tasks.

“I think if it is possible they should increase the number of health service providers here at least if we are many we can divide tasks among ourselves that everyone know his responsibilities everyday if we were at least five it would have been better, this one does this, this check this” (Facility manager, dispensary).

Another informant shared similar views:

“You have to know professionals available in the market, and then you advertise or request money for employing Medical Doctors while you know they are not available. Take enough clinical officers; you take medical attendants who in a way will reduce those small tasks. The few technicians has to do skilled jobs, they have been advised to employ medical attendants who are form four who will up-grade while at work” (Health manager, regional level).

There was also a suggestion on increasing the number of students admitted in different medical courses. However, the quality of training should not be jeopardized.

“The issue of shortage of staff needs to be widely looked at starting from the training institutions in which people study either as Clinical Officers, Assistant Medical Officers, and Medical Doctors. Institutions have to increase the number of students admitted in different courses and produce qualified graduates. However, we should not reach a stage where we
produce graduates who are not competent in the field just because we have scarcity of staff” (Health manager, district level).

Moreover, it was suggested to reintroduce a volunteering system where form four leavers were helping in delivering health services.

“There was volunteering system in the past. I think in the past, form four leavers were helping a lot in offering services they were helping a lot in minor activities here for example in dispensing medications and vaccines if they are taken they perform well. I think it is best if these people are reintroduced again” (In-charge, health centre).

As summarized in figure 1, the study describes the shortage of health service providers, which results into multiple tasks as well as the heavy workload among the few available service providers. In turn, multiple tasks and heavy workload bring about the devised strategies of providing health services. Moreover, the devised strategies of providing health services jeopardize quality of health services and ultimately affect utilization of health services.

**Figure 1: Implications of shortage of health service providers**

**DISCUSSION**

The reported shortage of health service providers described in the present study corroborate that of previous reports in Tanzania (Manongi et al., 2006; Mæstad, 2006; Kurowski et al., 2007; Rolfe et al., 2008). Indeed, shortage of service providers poses a threat to the quality of health services. When the number of patients per health worker grows sufficiently high, there is insufficient time to diagnose and treat all patients adequately (Møstad et al., 2010). As such, when there are few health service providers, workload per worker grows high, and less time is available per patient or client (WHO, 2006). As the provision of high quality care requires health workers to spend sufficient time and effort with each patient or client, a decline in the quality of the services is then likely.

Study participants reported various practices in the context of health service providers’ shortage. On the one hand, service providers specialize in specific units. While studies done elsewhere have found that specialization in its broader sense has better outcomes when it comes to specific diseases (Grill, et al., 1995; Hillner, et al., 2000) it may have no great outcomes when it is at the lower level health facilities as it is likely to magnify the shortage of health service providers (Hongoro and McPake, 2004). On the other hand, the few available service providers are allocated to the neediest areas and to the critical health conditions. While this is a viable strategy as it focuses on medical conditions, it may unexpectedly create some sense of mistrust and dissatisfaction among other patients and clients who need health care. This is especially in Tanzania where corruption in health sector has been a stumbling block upon accessing services especially among people with meagre income (Kamuzora, 2004).
As revealed, health service providers are also compelled to ask the patients to wait for some hours. This may be a useful strategy particularly when patients or clients feel that they get adequate time with their physician (Anderson et al., 2007). However, long waiting time for an appointment to see a service provider may have some unanticipated consequences as it may reduce patient satisfaction and ultimately lead to decreased utilization (Gerein et al. 2006). Patient waiting time may also lead to poor patient compliance with instructions (Afolabi and Erhun, 2003). Moreover, delays in cases such as obstetric emergency result in death, illness or disability for mother and infant, especially in the context of Tanzania where there are cases of delays in the household decision for seeking care and in reaching the health facility (Killewo et al., 2006).

It is worth noting that in order to match with the heavy workload, service providers are compelled to provide services as quick as possible. While this strategy may serve the purpose and sometimes satisfy the clients, it may also result into the inability of health care providers to provide quality services (Troy et al, 2007). As such, the tendency to provide health services so quickly has been associated with higher patient mortality (Aiken et al., 1994).

As suggested by study participants, it is imperative to recruit the health service providers so as to fill in the existing gap. While this suggestion is valid to address the shortage of health service providers, in practice, the process of hiring health workers in Tanzania is currently very complex and demanding. Under the current decentralized system, regions and districts have the mandate to identify and fill existing staff vacancies. However, low human resource management capacity at the district level contributes to slow recruitment process as well as delays in staff placement. As such, very few District Health Management Teams (DHMTs) fully understand the processes for hiring and have the capabilities to complete the requirements. Such process involves the Ministry of Health and Social Welfare; the Ministry of Finance and Economic Affairs; as well as the President’s Office Civil Service Department. In addition, the poor economic condition necessitates setting of budget ceiling on personnel emoluments which limit recruitment of required health staff. For example, the public sector currently hires only between 500 to 800 health workers annually, despite an annual training output of approximately 2,500 (Bryan et al., 2009).

Study participants also suggested retention of service providers is still a huge problem. This may be due to the problem of motivation of health service providers. On the one hand, motivation and job satisfaction have been proven to be critical to increasing the performance of health workers and thus the performance of the health system. On the other hand, low motivation has been reported to have negative impact on the performance of individual health workers, facilities and the health system as a whole (Mathauer and Imhoff, 2006).

The second suggestion focused on training. Again, the expansion of the numbers of doctors and nurses through training is highly constrained in context of developing countries. For example, it takes six years to train a new doctor, three or four to train a nurse and four to train a midwife, which is a long time, in view of the immediate need for health workers. Moreover, current training facilities are insufficient to meet the need fast enough. Thus, waiting for enough new workers to graduate through the conventional systems will mean lengthy delays in providing urgently needed services. The capacity of health training institutions is not fully exploited yet. Consequently there is a low output of trained personnel. Training institutions have several setbacks (understaffing, neglected infrastructure, and low investment) to match the existing demand.

Methodological limitations of this paper need to be considered. First, the findings are based on interviews health with health managers, health providers and health committee members. No attempt was made to explore the issues of staff shortage and increased workload by reviewing relevant health facility record. Second, the selection of the regions, districts, and health facilities covered by the study was purposive, for reasons explained. This raises the question of the generalization of the findings. In that way, it should be underscored that the focus of the paper was not to generalize.

CONCLUSIONS

Despite the shortage of health service providers that cause a heavy burden among health care providers, still, provision of health services is an on going process. This may automatically affect the quality of services. This implies that policies to address the human resource challenge in Tanzania
have to address issues related to the performance of the existing workforce. In that way, health care providers who provide extra services need to be motivated. Moreover, sense of altruism need to be enhanced among health care providers.

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