Perceived Impact of Health Sector Reform on Motivation of Health Workers and Quality of Health Care in Tanzania: the Perspectives of Healthcare Workers and District Council Health Managers in Four Districts

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Abstract

Background: Literature on the impact of health sector reform (HSR) on motivation of healthcare workers (HWs) and performance in health service provision in developing countries is still limited. Objective: To describe the impact of HSR on HW motivation and performance in providing quality health care in Tanzania. Methods: Four districts selected from three regions were covered, involving in-depth interviews with HWs in public health facilities (HFs), focus group discussions with district managers and researchers’ observations. Data were analysed using a qualitative content analysis approach. Results: The cost-sharing system in public HFs and national health ‘basket’ funding system introduced in 1990s were the key HSR elements identified by the study participants as impacting on HWs motivation and performance. User-fees for public healthcare services was acknowledged as having supplemented government funds allocated to public HFs, although such facilities still experienced ‘stock-outs’ of essential medicines and other supplies, HF understaffing, low/lack of essential remuneration, shortage of and unrepaired staff houses, meagre office space, lack of transport facilities for emergency cases, minimal recognition of HWs at local primary healthcare committees and the district health service budgeting system being controlled by district and central level authorities, leaving little room for lower level stakeholders to participate. Conclusion: For the national healthcare system to succeed, HSRs will need to involve and motivate HWs who are frontline implementers of the reform strategies.

Key words: Decentralisation, priority-setting, human resources, health staff morale, Tanzania

Introduction

The importance of looking at broader contextual factors influencing the performance of the health sector around the world can be traced as far back as the 1978 Alma-Ata Declaration. In this declaration, the World Health Organization (WHO) proposed ‘Better Health for All’. This goal emphasised that it is the right and duty of every member of the society to participate individually and/or collectively in the planning and implementing of programmes geared to improving their healthcare needs. [1] To improve the situation that was facing the health sector in terms of both financing and delivery of the required services, countries all over the world instituted health sector reform (HSR) strategies. During the period between 1980 and 2000, countries in sub-Saharan Africa underwent a series of reforms in their health sectors. Following this step, there has been an increasing enthusiasm for understanding the potential and actual impact of HSR on the various levels of health services and whether or not such reforms are meeting the needs of the populations in the countries concerned. Analysts argue that since the health sector is basically labour intensive, the success of the reforms introduced depends on, among other things, the behaviour of those implementing the reform policy. [2,3]

Health workers (HWs) are increasingly identified in many research and policy documents as a key engine for making these reforms a success. This conclusion is based on the finding that HWs (defined in this case as staff directly involved in health-care service delivery and their allied personnel within and beyond healthcare

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facilities) may act as facilitators or decelerators of such reforms through their motivation-based performance in the implementation of various activities or processes designed to achieve the reform’s programme goals. [3] However, little effort has so far been made to explore and analyse the individual and collective reactions, both in terms of attitudes or motivation towards the practices related to HSR from the HWs’ perspective. [2-4]

It is imperative, therefore, to evaluate HW motivation since low motivation can have a negative impact on the performance of individual HWs, health facilities (HFs) and the health system as a whole. [5-7]

To reform is to review or make some changes in a policy and/or its implementation. However, the extent to which this is actually done and whether and how it should be done at different levels in the health system need to be carefully examined. The rationale for that is based on the experience that change processes are often difficult, painful and frequently do not yield all the expected results. For this reason, it is imperative to understand the reactions to the effects of any reforms in order to address the challenges to efforts aimed at the attainment of the policy goals. [8] Policy authorities have, at least in theory, insisted on the need for involving all the key actors, including communities among whom are the HF based HWs, in the health priority-setting processes [4, 9, 10]. Unfortunately, debates have persisted regarding whether or not, how and to what extent the non-health professionals could be involved in the priority-setting processes only under the umbrella of HSR. Proponents of involving professionals in the priority-setting processes maintain that, in some instances, professionals should make decisions on behalf of the general public. [11-15] Others recommend that shared decisions would minimise the conflicting preferences between the professionals and the targeted service beneficiaries e.g. community members. [16] Emphasis on HWs’ involvement in priority setting strategies is crucial because the success of any health programme can only be realised if the HWs involved in implementing the programme are adequately motivated. [17-20] Studies have shown that the conditions facing HWs at lower levels of the healthcare system are not given adequate acknowledgement or consideration due to the persistent top-down, hierarchical priority setting approach. [21] Meanwhile, lack of information about the available health budget and skills for informed decision-making at the local level limit the ability of community-based groups (including HWs) to influence resource allocation. [22, 23]

HSR in Tanzania has been expected to facilitate the transformation of the health system into a system which is effective, efficient, equitable and responsive to the needs of the society. [24, 25] To make this possible, the government, through the office responsible for regional administration and local governments decided to require the participation of all key stakeholders in the design and translation of the reforms into action. [26] Unfortunately, as in the past, this did not occur. Previous studies in Tanzania identified weaknesses related to health financial planning including budgeting at district level. [27, 28] This evidence supports what other analysts described as the resource allocation and budgetary systems involving key stakeholders being neglected and has led to some programme failures in many countries around the world [1, 15] while it is a critical component of any decentralisation policy. [29] To date, there is inadequate evidence of the real world experience about HSR processes and outcomes in developing countries, and in Tanzania evidence on the impact of the reforms on motivation of HWs has not been documented. This paper reports a study that was undertaken in 2003 in four districts in Tanzania to assess, among other aspects, HWs’ and district health managers’ views on HSR participation in local health priority setting processes and the impacts of HSR on (or implications for) the performance of HWs in health service delivery at public HFs, especially after introduction of national health basket funding system (HBFS). The paper corroborates findings published elsewhere regarding the link between HSR, including among other things, the issue of HBFS and tropical disease control, as defined elsewhere [21] as well as the role of village representatives and community members in setting health priorities in the context of HSR. [27, 28]

Methodology

Study design

This was an exploratory case study of four health districts, namely Babati (in Manyara Region), Lushoto and Muheza (in Tanga Region) and Mkuranga in Pwani Region, Tanzania. It included different categories of stakeholders participating in local and district discussions aimed at addressing various health problems/issues [21, 27, 28] as well as field observations by the
researchers. The three categories of stakeholders involved were the frontline HWs, particularly those involved directly in healthcare service delivery processes, their supervisors HF levels and members of the district council health management teams (CHMTs). The aim was to collect opinions from each of these stakeholder categories with the ultimate aim of interpreting the findings in a triangulated fashion. Thus, the study adopted an embedded sub-case design. [30]

**Sampling strategy**

A multistage approach to purposive sampling was adopted: health districts, local HFIs within those districts and finally the participants. The multi-stage sampling process was undertaken to allow comparisons to be made between districts in terms of similarities and differences in the opinions expressed by the respondents as expected of case studies involving multiple kinds of respondents. [30] The study districts were selected from different regions based on two criteria. Firstly, to represent different district contexts in order to enable a comparative analysis of the study findings based on factors such as geographical contexts and epidemiologic situations. All districts were located in rural settings with the majority of their residents being subsistence small-scale farmers (although fishing is common in Mkuranga district) and malaria being common in all districts. [21] Secondly, each study district was in a different phase of HSR implementation, including the national HBFS that was being used to guide district CHMTs in developing comprehensive council health plans and associated budgeting. [21, 27-28, 31] This was a highly important consideration during the design of the study as case studies are usually conceived and undertaken for specific purposes which consider context specific factors. [30, 32]

Once districts (and hence the district CHMTs and district hospitals) were selected, the next stage of the sampling was to select local HFIs from within those districts, the intention being to include HFIs which represented different localities of the district concerned. [21, 27-28] Finally frontline HWs performing their duties in these facilities were selected i.e from two dispensaries, two health centres (HCs) and one district government hospital in each district. [21] During the pilot survey and through personal communications with the district CHMT members, it was noted that most of the HC’s and dispensaries were facing high levels of understaffing. Therefore a convenience sampling strategy was used to select one to four HWs for inclusion in the sample at each of the HF levels. The district hospital was represented by medical superintendents of the hospital who are also members of the CHMT. [21] Principally, a CHMT includes medical and paramedical personnel responsible for planning and other management roles including supervision of health service issues in the district and reporting progress to regional and national levels. As some of these members, for instance, the district medical officers (DMOs), are involved in routine health services, they could provide insight on health service issues addressing frontline HWs’ motivation but could not be involved twice in the data collection using different techniques.

**Data Collection and analysis**

Three research instruments were employed in the data collection process, and these include (i) an in-depth group interview (IGI) guide for use in interviewing the HWs and their in-charges/superiors at HF levels; (ii) a focus group discussion (FGD) guide for conducting FGD with district CHMT members, whereby each CHMT consisted of 8 members; (iii) an in-depth interview (IDI) guide targeting interviews with key district hospital management personnel, with additional opinions/ideas collected from other district central and local government officers, to make a total of 20 IDIs at district level, as described elsewhere [21], and (iv) a checklist for field observations. The pretesting of the research instruments was done involving HWs from three HFIs in the Muheza district, but the individuals who participated in the pretesting were not involved in the main study. This was followed by a piloting of the research instruments in the neighbouring district – Korogwe in order to test the relevance or usefulness of the research instruments before being refined and used in the main study. The FGDs were recorded using audio-tapes with the permission of the study participants and these were listened to immediately after the discussion sessions to back-up the handwritten notes. Verbatim transcription of FGDs was done immediately after the discussion sessions after which a qualitative content analysis approach was adopted. Similar approach was used in the data collection and analysis of the IGI and IDI notes from the rest of the study participants. The investigators’ field observations were guided by a checklist of things to be observed and had to do so by recording and taking notes independently at each of the places visited. Later on at the end of each day after fieldwork the events and contents recorded were discussed among the team members. The pictures
taken in the field were reserved for analysis purposes, but not for displaying in the report for confidentiality reasons. The main features observed include aspects such as the condition of the HF buildings, furniture, working space (offices), human resource levels, number of patient attendances at HFs in comparison with the HWs available, and laboratory facilities, among other things. All these were assessed together with other aspects considered to have an impact on the quality of healthcare delivered by the HWs and their actual use by target consumers.

The IGI with HWs like those used in the rest of the IDIs and FGDs involved open-ended questions. As for the HWs at HF levels, the investigators had to wait for the respondents to secure ample time to participate in the interviews, either very early in the morning or late in the afternoon after, their official working hours. The themes addressed under the IGIs, IDI and FGDs were quite similar to allow triangulation of the findings, the difference lay in the application of the questions under each data collection technique. Both the IGI and CHMT participants in FGDs were asked to give their general understanding about HSR; opinions/experiences about HWs’ working conditions following the reform packages instituted; how HSR contributed to HWs’ working conditions, quality of healthcare delivered and accessibility of healthcare services by the targeted recipients. Furthermore, they were asked about the role of HSR on HWs’ participation in local health priority setting including allocation of national HBFS money to specific activities/services, as well as their views on what could be done to ensure that HSR met the policy objectives among which is the issue of effective and fair resource allocation and general HW motivation. The tool for IDI with district hospital medical superintendent and other district level officers has not been presented herein as already the details have been presented elsewhere. [21] Also, observation checklist is not shown since the particulars have been elaborated in this paper. When it was found to be somehow difficult to identify the direct link between HSR and infrastructural status of the HFs, attempt was made to seek opinions from the frontline HWs who could explain whether or not (and if yes, how) the reforms contributed to the observed situation at HF level. As scientifically recommended, the research team met every evening after fieldwork for debriefing on practical issues and making necessary updates as the data collection process progressed. [33] Data from different localities or sub-groups of the participants were treated separately at the data collection stage with initial transcription done before the data could be analysed comparatively, using contingent and pattern analysis approaches. [30] The ethical clearance for this study was obtained from the Ministry of Health through the Medical Research Coordinating Committee. Contacts with the district health and government authorities in the study locations had been made prior to providing them with the copy of the national ethics clearance.

Results

Five major themes emerged from the analysis, and these include: the (i) Knowledge about HSR; (ii) Financial impact of HSR; (iii) Working conditions experienced before and after HSR; (iv) Impact of HSR on the management of health services; (v) Impact of HSR on stakeholders’ involvement in health planning.

Knowledge about HSR

In all districts, the cost-sharing policy introduced in the early 1990s beginning with the emphasis on user-fees [34] was perceived by all categories of the study participants at HF and district levels as one of the prominent features of HSR. Aspects related to decentralisation of planning and other management functions, particularly devolution of powers to district health authorities to set health plan with budgeting component were also pinpointed to be part of HSR arrangements, especially at district CHMT level.

Varied levels of awareness on the issue of national HBFS were noted among the different categories of the study populations in different districts, but generally the less informed ones were the HWs working at the dispensary level. Additionally, those in charge of HFs and their closest assistants in the administrative hierarchy were more conversant with the national HBFS than the rest of the staff cadres. Those more informed had benefited from their participation in the local PHC committee meetings and having more contact with district level and central and local government officers as well as with the ward councillors than the rest of the staff. This implies that one’s exposure to issues increases the likelihood of having more knowledge about such issues.

Financial impacts of HSR

HWs at HC and dispensary levels reported an agreement reached by local primary healthcare (PHC) committees that each patient attending at a public/govern-
ment HC had to pay a user-fee amounting to USD 0.5 (Tsh 500) for the health services on their first visit and USD 0.1 (Tsh 100) for subsequent visits irrespective of the types of the services they received. At government dispensary levels, the patients had to pay USD 0.1 (Tsh100) at each visit.

The revenue collected was intended to help pay wages for the HF watchmen and for the kerosene procured to support the stoves and lamps used at HF level during service delivery hours at night due to lack of electricity at most of the lower level HFs in all districts. During this study, the user fee structure set by ward and village PHC committees was already being implemented at HC and dispensary levels in one district only, but at the time of publication, such a structure now exists in all districts (DMOs, per comm.). In the district hospitals each outpatient had to pay USD 0.5 (500 Tanzanian Shillings) per visit. The inpatients had to pay USD 1.0 each time they visited and registered at the HF in order to receive a range of services delivered until the patient was discharged. These rates clearly indicate that even most of the inpatient services were greatly subsidised by the government.

The HWs and their superiors at district level viewed that this form of revenue mobilisation was greatly appreciated as it supplemented government limited budget for health, although the community at large were unhappy with paying user-fees. In all the study districts it was confirmed that user-fees at government HFs were introduced in July 1993 beginning with the services delivered at the district hospital. At one HC the HWs reported being uncomfortable with having to advise patients to go elsewhere to procure drugs and other essential materials due to stock-outs at the HFs where they worked, as the following testimony illustrates: “Communities complain against cost-sharing when they are told to pay 100 shillings for kerosene and yet again they are directed to buy some drugs elsewhere”.

As revealed by HWs and confirmed by district CHMT members, occasionally HCs experienced stock-outs of the government supplied essential medicines and materials. This was reported to be due to such HCs having to serve a larger size of the population than estimated by the government. It was claimed that the HCs concerned were delivering services to people who were coming from other districts or other wards in the same district instead of concentrating on people coming from their catchment areas only. Therefore, it was not uncommon for more people than expected to visit directly the HC or district government hospital and by-passing deliberately the dispensaries perceived to lack the desired services.

That is, the patients concerned were referring themselves after noting either a serious shortage/lack of basic diagnostic (e.g. laboratory) and curative (e.g. medical consultations, medicines, and blood transfusion) services at lower HF levels. In all the study districts, quinine and intravenous (IV) fluids were identified to be among the essential supplies that were occasionally out of stock at all HFs. A positive note was given by HWs at one dispensary that the user-fee system had enabled the dispensary to be renovated, a suitable pit-latrine constructed and the maternity ward extended. These changes were perceived by the HWs as having motivated community members to utilise the dispensary.

CHMT members in all districts also commented that the user-fee rates were modest enough and took into account concerns about inability to pay by the poor, in addition to the government exemption policy for the vulnerable groups (children under five and pregnant women and patients suffering from specific diseases). Some members added that the user-fee system partly checked out of the HFs the people who could attend and demand medicines unnecessarily at higher level facilities without first passing through the dispensaries. The impact of this could be to release the work-pressure on the side of the frontline HWs at the understaffed HFs. Nevertheless, these participants admitted that as most people are used to getting free services at public HFs, it was obvious that the user-fee introduction could not be positively perceived by all people.
Working conditions experienced before and after HSR

In all districts, HWs and health managers reported to be unhappy with the serious understaffing, low salaries and related financial conditions, shortage of basic equipment and consumables, including those related to diagnoses; and prevention of infections at HFs, especially at dispensary levels. HWs in all districts disliked the compulsory deduction from their salary to contribute to their membership of the national health insurance fund (NHIF) scheme mainly because their salaries were still very low. Apart from the low remuneration packages, other constraints reported in all districts included the so called ‘delayed’ or unpaid extra-salary allowances such as hardship, leave and on-call allowance, and delayed promotion (Table 1).

This lack of compensation was due to what was described as the government’s decision, after experiencing budgetary constraints, to waive these and other payments such as support for staff transfer from one duty station to another and burial allowances (the latter allowance was reported to be designated in event of a deceased relative). In this respect HSR was perceived to have not made any improvements in the working conditions. As much as they were reported, the shortage of unpaid/delayed allowances was not denied by CHMT members and other district level officers and in several occasions some of the conditions have even become worse.

A serious lack of qualified nurses, especially midwives, was reported by both the HF based HWs and CHMT members. According to district CHMT members, the nursing cadre included medical attendants (previously known as nurse auxilliaries) and that due to the limited number of such a staff cadre, the burden of the workload was borne mostly by it (i.e. nursing staff cadre). The situation was worse whereby the nurses apart from attending to the outpatients and inpatients were required to attend to the pregnant women and children attending the maternal and child health (MCH) services at HF level. At times even the clinical officers were forced to leave patients to attend to the MCH clients for the general services, especially when some of the nursing staff were away on leave or other official commitments such as attending mobile/outreach clinic services. The HFs, especially those bordering neighbouring districts, were serving clients from other districts, thus exceeding the government requirement that a dispensary should serve at most 10,000 people.

Note: (+), (++), (+++) and (++++) indicate that the condition concerned was reported at one, two, three or four study HFs, respectively. The (-) indicates that the condition concerned was mentioned. The number of respondents was not of interest in this qualitative analysis, rather the content. A similar approach was used in presenting other results from the major study in the same districts. [21]

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<thead>
<tr>
<th>Condition</th>
<th>BABATI District</th>
<th>LUSHOTO District</th>
<th>MKURANGA District</th>
<th>MUHEZA District</th>
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<td>Understaffing</td>
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<td>Delay in staff promotion</td>
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<td>Occasional friction with local leaders on certain aspects</td>
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<td>Lack of/unstable electricity for night duties or cold-chain</td>
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<td>Lack of/Unreliable tape water</td>
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<td>Poor health facility buildings</td>
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<td>Occasional shortage of bed-sheets for the inpatients</td>
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<td>Lack/shortage of wards for admitting admissions</td>
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Additionally, it was also related that, although the government HF establishment guidelines do not allow dispensaries to admit patients, occasionally patients who are seriously ill or injured had to be accommodated for some hours before they could be referred to higher level HFs or before being discharged. This has caused significant inconvenience to the HWs when the HFs concerned lacked adequate space or appropriate facilities for holding such patients for a period of time. The same situation happened when pregnant women who are in serious condition before or during labour had to be temporarily given a bed to rest while being given the first/emergency care aid. The staff at one HC reported a lack of isolation rooms for TB patients to reduce possible cross-infection to other patients in the same ward. This situation led to anxiety among many patients and their relatives/caretakers. The district CHMT confirmed this to happen.

Lack of a microscope was reported at all the dispensaries in all the districts as a problem and a disappointment to both the HWs responsible and patients. However, at one HC the microscope could not be utilised due to the lack of a trained laboratory technologist. The latter problem was reported as being common at many government dispensaries whereby the clinical and nursing personnel were being forced to either diagnose and prescribe medicines based only on clinical conditions presented by the patients or using the microscopes themselves while at the same time being awaited by patients in other sections. As a result, this raised concern among the patients who were informed of this situation. For instance, in one district HC for an extended period of time there had been no clinical officer (CO) or assistant medical officer (AMO) to serve patients on some days. Instead, the services were provided by a laboratory attendant. This staff member had originally been a watchman at this HC then underwent a short orientation course on laboratory work. This situation was not perceived positively by some patients who were informed about this individual’s lack of professional background and perceived the staff concerned as being incompetent, hence discouraging the patients who visited the HC when the CO was away. At several other primary levels HFs in other districts, a similar situation existed, that of having only one laboratory attendant available to perform diagnostic testing. As a consequence the nursing personnel had to conduct basic laboratory tests in the absence of the laboratory attendant. In addition, in the absence of COs they also had to provide drug prescriptions. These situations occurred was confirmed by the research team during field observations and by the CHMT members.

Concern was also expressed by the HWs at HFs and their superiors/supervisors at district level about HWs not being able to enjoy their weekend or leisure time due to a lack of staff to replace them for the different duty shifts. The additional workload beyond normal official working hours affected the morale of the HWs and quality of MCH services. The following statements from at least two districts reflect this situation: “We have to sacrifice so much because you can’t leave a mother in labour helpless when you are called at night. But it is hard to explain and let one understand. You know, we lack time for cooking food for our little children who come from school to find an empty house or with just a helpless house-worker. (a midwife at one government dispensary, in Mkuranga). Another one argued: “To me the issue of drug shortage is not as serious as staff shortage because it is not easy to tell your patients that I am now tired; it can have far reaching implications (a CO at a government dispensary, Babati).”

HWs at one HC reported sometimes to have been forced to buy work uniforms by paying out of their own pockets without being refunded by the district health authorities. Likewise, shortage of staff houses and work supplies (e.g. gloves and disinfectants) demoralised the HWs as they feared possible infections like HIV, especially while assisting the birthing mothers with bare hands. This problem was commonly reported in all study districts and particularly by HWs based at dispensaries. Concerns were also, expressed about the lack of ambulances for patients requiring referrals to higher level HFs, especially for women experiencing complications of labour and other emergencies. There were other issues related to HF provisions like water or delivery of supplies for outreach locations whereby individuals hired to fetch water or carry the vaccines, etc. were paid a non-attractive equivalent of only USD 0.1 (Tsh 100). In the absence of money from user fee revenues, the HWs were being forced to pay out of their pockets to finance these expenses. Because of these issues, most HWs saw HSR as having failed to bring about the desired improvements in health service delivery conditions due to a lack of increased budget allocation for procuring basic equipment and improvement of other working facilities. The following statement reveals some of these sentiments: “If they die in your hands, everyone points a finger at you. You lose most of your friends if they are related to the deceased because people wrongly judge us, especially if you are not born in this place…they call us careless people…mhh… it is really bad to work in peripheral areas like this (a nurse at one HC).”
Other participants condemned the politicians for amplifying matters and making unfulfilled promises to the public about service conditions and measures for their improvements. As reported, some local leaders were providing either misleading/false or unrealistic information about the health services and thereby creating negative community perceptions about the frontline HWs. Representing the experience of all members in the group interview, the following testimony came from one district: They tell their voters that when they get elected, things will be improved and promise a lot. Some leaders are good at feeding people with nice words which are hopeless. Oh... If I get elected you will experience no drug shortage...Oh... I will talk to the higher authorities to ensure that we get an ambulance to prevent our little children from dying on the way to hospital (a nurse supported by other staff members from that HC). In contrast, the majority of HWs in almost all study districts and their respective CHMT members appreciated the renovation of some HF buildings following an increased budget as a result of the national HBFS [27-28]. The renovated buildings were also observed by the study team. The team also reviewed the comprehensive district council health plans which indicated the CHMTs’ acknowledgement of the national HBFS for the increased budget allocation for health and the decentralisation policy for priority setting. In addition, a staff member at one HC acknowledged the national sector wide approach to setting health budgets for priority health cost centres and activities as having helped the HCs to obtain maternal delivery beds and charcoal stoves, as well as HF renovation.

**Impact of HSR on the management of health services**

There was general acknowledgement in all districts that the introduction of user-fees in public HFs had led to an improvement in the management of drugs by minimising the previous over-prescribing behaviour of the HWs: “The staff at HF would be accountable to their local PHC if they mismanaged drugs and carelessly spend the money from their patients to replace the stocks. They would be asked about how the money was spent” (DMO in one district). Several HWs, from all districts, particularly those in charge of HFs, felt that it would be better if user-fee revenue was retained at HF level rather than being sent to be deposited in the special account at district level. They claimed that this involved a too bureaucratic procedure that had to be followed to access the money required to meet at HF needs. This opinion is consistent with what was reported by their fellows in Korogwe District during a different study [34].

**Impact of HSR on stakeholders’ involvement in health planning**

HWs were also concerned with central government authorities, particularly at ministerial levels, setting the conditions for allocation of funds and other resources for different levels of HFs with a little room allowed for involving frontline HWs in priority setting at local PHC levels. While acknowledging the HF in-charges to be members of local PHC committees responsible for identifying community priorities for health at particular level, the HWs interviewed across all the four districts complained against the proposals presented by their representatives not being taken into account in the final decisions made concerning budgetary allocations for specific health needs. As reported, the local PHC committees were still weak to influence or affect decisions at higher levels in relation to health needs, including the expenditure of the health basket funds from central level, and this was confirmed by the district level health and local government authorities [21]. At all the HFs visited, HWs were unhappy with the over-interference by some of the local government leaders when it comes to decisions made by the in-charges of HFs in favour of health services delivered at HF level.

**Discussion**

The present study reveals varied HWs’ knowledge about and perceptions on HSR that was mainly considered to be related to cost-sharing policy introduced to the public HFs. The varied knowledge possibly reflects the varying degrees to which the study populations were sensitised, through such means as radios, newspapers or political gatherings or technical meetings at workplaces. It is interesting that in all districts, the study participants at least acknowledged user-fee revenues as having contributed to generating funds for the renovation of HFs. Likewise, the appreciation that user-fee introduction has led to reduction in unnecessary drug prescription behaviour at government HFs, implies that the respondents were sensitive about the drugs that could be saved for later appropriate uses. In terms of general quality of care, the renovated HFs using funds collected from user-fees were perceived to have led to improvements in the physical condition of HFs where the services were being delivered. Hence a structural quality improvement achieved was attractive to potential users of such facilities. This finding
confirms what has been reported from the latest evaluation of the impact of HSR on the performance of the health sector in respect of general and specific services in the country [26, 35].

However, the concern expressed including user-fees revenues being deposited in the general district account and having to be requested back for use at the lower level HFs is relevant since the process is inefficient by generating unnecessary or wasteful administration costs at both levels [1, 37]. Although one of the HSR goals is to foster efficiency in the delivery of health services of acceptable quality to the target beneficiaries [38], it is imperative to bear in mind that once a payment system is introduced, those paying fees may develop higher expectations about the potential benefits resulting from the payment scheme/mec.

anism. To the individual patients or general public, drug shortages may lead to loss of trust in frontline HWs after a cost-sharing system has been introduced in the healthcare system. While patient charters maintain that patients have the right to, and are the best judge of, the quality of healthcare delivered by HWs, it can be quite difficult for patients/clients to challenge the professional autonomy of HWs. [39]

The concern by HWs that some priorities are set at central and district levels without involving the lower levels in the health system, especially those at grassroots level including frontline HWs, reflects what other authors have discussed. Such authors argue that within decentralised system elements of re-centralisation of decision-making powers still emerge [40], and this is also evident from a more recent study in other districts in Tanzania. [36] It is, therefore, appealing to propose that the critical working environment that HWs reported to face might limit (if not totally prevent) them performing their jobs well, including provision of the desired level of quality services. In situations of inadequate working facilities, unpaid allowances, HF understaffing, and lack of recognition of HWs, it might be difficult, if at all possible, to make the frontline HWs highly motivated in their workplaces. [36, 41, 42] HWs reported little recognition of their views/proposals by higher health authorities when it comes to setting local priorities for health. Such perception which is characteristic of what happens in practice with most of the reforms propagating community participation can be quite discouraging. [43] These among other systemic challenges should be understood and worked upon by the government as part of the national strategies aimed to solve the existing problems in light of the broad national economic development and poverty reduction goals. [26]

Strengths and weaknesses of the present study

Having covered four districts located in different regions, the present study provides a general picture of what is the likely perception in other regions of Tanzania of the role of HSR. The study was implemented some years back, after the government had set out new strategic plans for implementing a series of HSRs, with the main theme being decentralisation by devolution (D-by-D). Under the latter system, the major focus was on strengthening the district health services as well as strengthening and orientating secondary and tertiary service delivery in hospitals to support PHC. [26] As indicated by the present study findings, this aim had not yet been achieved by 2003. It could be argued that maybe some of the reform packages were still too new (e.g. the national HBFS issue) to be fairly evaluated. Nevertheless, the present study findings, especially of not valuing the views/priorities presented by some stakeholders are consistent with reports from recent systematic evaluations which drew similar conclusions [20, 26, 44-46]

Conclusion

As the government of Tanzania continues with efforts aimed to ensure that the country achieves the Millennium Development Goals, including those addressing problems related to human resources in the health sector [26], HSR should remain an important structural adjustment intervention to address the systemic healthcare delivery challenges. However, HSR may continue to have low levels of support if the HWs among other frontline implementers including district level managers, lose trust in HSR. Therefore, we agree with other authors that the proof of the reform is in the implementation [47,48], and add that HSR should be part and parcel of proactive strategies for enhancing the motivation of frontline HWs as long as concerted measures are taken to foster recognition of HWs for their work, their remuneration, trust by the general public and superiors/supervisors, and active participation in planning and resource allocation.
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**Authors’ contributions**

Both authors participated in the design of the research proposal and all other stages of the study. GMM was the principal investigator in this study and was closely assisted by Prof. KJN and Dr Erik Blas from TDR, Geneva, and drafted the first and revised versions of the present MS with substantial comments from Prof. KJN.

**Conflict of Interest.**

The authors declare there are no conflicts of interest to report.