

Evaluation of Healthcare Providers' Perceptions on Direct Health Facility Financing in Arusha District Council, Tanzania

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Abstract: Adequate and equitable healthcare financing remains a major challenge especially for developing countries. Primary Health Facilities (PHF) in these countries have historically had less autonomy in decision making and fund utilization. Thus, Tanzania has just started directing the funding of health facilities to primary health care providers. This study aimed at evaluating healthcare providers' perceptions towards the DHFF programme at public primary health facilities in Tanzania. This study utilized a qualitative case study design which was conducted at Arusha District Council in Tanzania. Data was collected purposively from healthcare workers who were implementing the Direct Health Facility Financing (DHFF). Data was collected through in-depth interviews and focus group discussions and analysed manually using qualitative content analysis.

The study found that, most of study subjects conveyed a generally positive perception concerning DHFF. The DHFF increased autonomy over procurement function particularly on financial resources planning and decision making. Monopoly by the MSD and bureaucracy by the government officials at district level in procurement process emerged. The (DHFF) brought financial equity, enhanced transparency in fund utilisation, increased funds allocation, enhanced decision making, planning and budgeting. Also, DHFF had positive effects on structural quality of maternal and child health services, accountability and governance, responsiveness of the health facilities, service utilization and health seeking behaviour. Challenges include: inadequate funds and human resources, little DHFF tools, late release of funds, lack of internet connection, remoteness of some facilities and finally, lack of complete autonomy. It recommended further improvement on implementation challenges of DHFF for more better-quality health service delivery

Key words: Healthcare, financing, health workers, autonomy, perceptions, evaluation, Tanzania

I. INTRODUCTION

1.1 Background

Adequate and equitable healthcare financing remains a major challenge for Low and Middle-Income Countries (LMICs), limiting access to high quality healthcare services particularly among the poor (Kuwawenaruwa et al., 2017; Musango et al., 2012; Mills, 2014; Zelelew, 2012; Han, 2012). Public primary healthcare facilities in the LMICs have historically had less autonomy in decision making including fund utilization (Collins *et al.*, 1999; De Geyndt, 2017). The funds for primary healthcare facilities were managed and controlled by the central government usually at district levels and, therefore, facilities had no direct access to cash or to direct control of financial resources. It has always been the case that even funds that are collected at the health facility were supposed to be deposited into the district account. Activities and budget for primary health facilities were planned at the district levels. This resulted in delays in the introduction of various health initiatives that led to the poor quality of the delivery of health services.

In light of the aforementioned concerns, many sub-Saharan African countries have implemented reforms to strengthen their healthcare financing systems in the health sector (Gilson, 1995; Sekwat, 2003; Zelelew, 2012). One such strategy is the introduction of fiscal decentralization by directing the funding of health facilities to primary health care providers (Tsofaet *et al.*, 2017). The goal of fiscal decentralization is to improve efficiency and service quality and to empower primary healthcare providers become more creative and innovative in provision of health services and also to grant autonomy to them in the planning, budgeting, management and use of funds (Asian Development Bank, 2015; Frumenceet *et al.*, 2013; Goodman *et al.*, 2014; Regmiet *et al.*, 2010). Tanzania is one among of a number of African countries which has already introduced the Direct Health Facility Financing (DHFF) programme in the health centres and dispensaries. It is aimed at

fostering creativity, innovation and granting autonomy to public primary healthcare providers to manage funds, plan, and budget at facility level to deliver quality services to the population (Kapologwe *et al.*, 2019).

1.2 Statement of the problem

Despite the growing recognition of this kind of evaluation approach in the world, the aspect of the implementing partners' perspectives towards this new national initiative has not been addressed. It is very crucial to include the perspective of the program implementers due to number of reasons; first, their views and suggestions can be used by decision makers to improve the activities of the programme being implemented (Patton, 1997). Second, understanding practical insights and challenges from the field, clarifying programme plans and improving communication between stakeholders (Shek & Ma, 2012; Limbani *et al.*, 2019). Third, when the programme implementers are given a chance to express their views and thoughts, they will feel more valued, respected and recognised, keeping them highly motivated (Waweru *et al.*, 2013). Forth, in contexts where a programme is introduced in different settings, implementers would have different concerns and experiences (Bryk, 2016; Hawe *et al.*, 2004). Lastly, according to the principle of triangulation, collecting data from different sources during programme evaluation gives a broad understanding of whether such data collected generate the same picture (Bluhm *et al.*, 2011; Yin, 2009; Patton, 1999).

1.3 Relevant scholarship

Opwora *et al.* (2010) conducted a study in Kenya to investigate the perceptions of local level health workers towards implementation of the direct facility funding programme and found that majority of health providers had positive attitudes towards the programme. They felt that the programme was good designed and implemented and resulted into improved service delivery and control over their own finances at health facility level. A study by Regmi *et al.* (2010) which was carried out in Nepal revealed that both clients and healthcare providers generally perceived positively towards the fiscal decentralization reform in the health sector. Kapologwe *et al.* (2019) in Tanzania revealed that implementation of the DHFF programme in Tanzania reduced bureaucracy in procurement of drugs and health commodities leading into increased improved health system responsiveness in provision of health services at the primary health facilities all over the country. Mbogela and Mollel, (2014) conducted a study in Tanzania and found that flow of funds from central to local government level as set out in the DHFF programme proved increased availability and accessibility of funds and in turn improved service delivery at lower levels.

A study by Antony *et al.* (2017) in Benin found that implementation of the resource facility-based financing scheme was limited by verification procedures at the district levels and late feedback to facility staff, resulted in delays in bonus payment and restricted the potential to improve service delivery.

II. METHODS

2.1 Participants (subjects) characteristics

Table 2.1 summarizes the demographic attributes of respondents from interviews and those who participated in the FGDs. The study involved a total of twenty-five (25) participants. Fifteen in-depth interviews were carried out with fifteen (15) respondents and three (3) FGDs with ten (10) respondents. Participants were categorized based on their socio-demographic variables namely; age, gender, education level and designation.

Table 2.1: Socio- demographic characteristics of the study subjects

ATTRIBUTES	FREQUENCES	PERCENTAGES (%)
Age groups		
25-34	6	24.0
35-44	13	52.0
45-54	5	20.0
55+	1	4.0
Total	25	100.0
Gender		
Male	7	28.0
Female	18	72.0
Total	25	100.0
Education level		
Certificate	8	32.0
Diploma	15	60.0
Bachelor degree	2	8.0
Total	25	100

Designation		
Nurse	13	52.0
Doctor/Clinical officer	9	36.0
Accountant	3	12.0
Total	25	100

Source: Author's Construct (2020)

2.2 Sampling procedure and sample size

Participants of this study were healthcare providers at the public primary health facilities who are directly involved with DHFF programme implementation including the HFGC members. A list of all public primary health facilities (i.e. Health centres and dispensaries) that are eligible (implementing the DHFF) were obtained from the district medical officer (DMO) of Arusha DC. Out of this list, a total of 12 health facilities were chosen randomly using simple random sampling representing the target population of this study. From each of these 12 health facilities, 25 healthcare providers were purposively selected as study participants representing a sample size for the study.

2.3 Data collection methods

Data was collected from primary sources through In-depth interviews and focus group discussion (FGD). In-depth interviews were conducted with the health service providers involved with DHFF programme implementation to obtain a more detailed and deeper understanding regarding their experiences of the programme of interest. These participants were selected based on in-depth understanding of the subject matter. Focus group discussion was another method used where each session of FGD comprised 3-5 health service providers who were directly involved with the DHFF programme implementation. A total of 3 FGDs were conducted with 10 respondents, reaching saturation decided this number of FGDs and the amount of data collected. The information obtained from FGDs was mainly focused on gaining an understanding about the perceptions, opinions and views of health service providers regarding the DHFF programme and complemented the data obtained in in-depth interviews.

2.4 Data collection tools and procedures

A semi-structured interview guide and FGD guide were used to collect data from participants during data collection activity. Face to face in-depth interviews and FGDs were conducted in Kiswahili and recorded using the audio digital tape recorder. Audio files were transcribed by the researcher immediately after each session, and then translated into English by the same bilingual researcher who also facilitated the FGD and conducted the interviews. All transcripts were imported into Microsoft Word 2007 and then saved into a computer-based text file for data management.

2.5 Study design

A qualitative case study design was utilized to collect data from health providers in order to explore their experiences towards the introduction of the DHFF programme within the public primary health facilities at Arusha DC. Given the fact that this programme was recently introduced in Tanzania and that the area of an interest has not yet been extensively studied, the chosen study design was appropriate for understanding the knowledge gap in this area of research, creating a basis on which further studies can be developed.

III. RESULTS

3.1 Data analysis

Thematic content analysis was conducted, which entailed coding data according to key themes arising from the data. Initial coding was done by the researcher immediately after data collection session. The codebook comprised four major themes: (1) participants' perceptions on the DHFF programme implementation with subthemes, namely design, training, supportive supervision and mentorship, employment of assistant accountants, DHFF implementation guidelines, disbursement of funds to approved facility accounts, and provision of tools for DHFF programme implementation and coordination; (2) Benefits or achievements and overall effects of the DHFF at the facility level with subthemes, namely how/whether the programme has; affected procurement function, improved the structural quality of maternal and child health services, increased accountability and governance, increased responsiveness of the health facility to patients, improved service utilization and health seeking behaviour and (3) Challenges incurred during the implementation process. Study findings are validated through triangulation and synthesizing data across respondents and key quotations from verbatim were included in the final report.

3.2 Perceptions towards the design and goal of the DHFF program

A number of respondents reported that implementing the DHFF is the best decision and it was thought to improve health service provision at the respective facility level:

Among the best decision the government has made is to launch the DHFF, it is the good thing. I have been working here for the past seven years, and I can tell you this programme has brought a lot of improvements to our health facility in term of healthcare delivery (Nurse: in-depth interview).

Other participants attributed the merits of the DHFF with increased freedom and transparency in the health care settings: *This program is really good, now we have the freedom to plan how we are going to use the funds to meet the centre's specific needs (Doctor; FGD)*

There were, however, concerns expressed by a number of respondents over the adoption of the DHFF with the main reason reported being the increase of workload something which was largely attributed to inadequate human recourse:

I think they planned and brought this programme to us, to me is like it has increased our workload because for now we are also required to do so many activities related to the DHFF including monitoring monetary affairs and making budget hence keeping us busier than before (Doctor: in-depth interview)

We the assistant accountants are overloaded; each of us has seven or eight facilities to provide accounting expertise... at least one accountant could have two or three facilities but eight is, honestly speaking, too much work... (Accountant # 3 DC; in-depth interview)

3.3 Perceptions on implementation of DHFF key components

3.3.1 Provision of training on DHFF programme

The results reveal that some respondents perceived that training on DHFF was adequately provided to them as quoted below:

Exactly, training about DHFF was conducted on how to implement this programme, CHMT members were trained first and later on one, we [health workers] were trained by them to better understand how this programme operates.” (Doctor: in-depth interview)

On the other hand, some respondents argued that the training on the DHFF was inadequate or was just provided to few of them. This finding implies a limited DHFF training among the healthcare workers:

There were a few hours training to the accountants and us doctors but most of the nurses have not received training, this is probably because they were hired after the introduction of DHFF (FGD, Moivo dispensary).

In addition, some participants reported that no DHFF training at all was received:

... “I don't see that this aspect had been implemented well because myself I have not been trained on DHFF. (Nurse, Bangata HC; in-depth interview)

3.3.2 Dissemination of DHFF guidelines

The findings revealed that a number of respondents said that dissemination of DHFF guidelines was adequately done especially to those who were directly involved in this programme:

We have been provided with the guidelines and several times they make updates and we get them; it has helped to improve the program because a lot of things are changing to meet the advanced requirements especially in the accounting system (Accountant #3 DC... in-depth interview)

In contrast, it has been also revealed that a number of participants said no any guideline of DHFF was provided to them:

... “There are no guidelines, we were told that there are notes but it has been a challenge to get them.” (Clinical officer Bangata H.C-in-depth interview)

3.3.3 Employment of assistant accountants as per DHFF programme plan

The results show that, most of the participants perceived the employment of assistant accountants responsible for implementing DHFF to be inadequately adhered. These results reflect a shortage of accountants devoted for execution of the DHFF programme. It has been also revealed that the few available assistant accountants were responsible to attend several health facilities as it was reported by most of the participants:

... “I believe accountants are overloaded, an accountant has 8 facilities and he/she have to make rounds until she/he reaches each facility.” (Clinical officer Bangata H.C-in-depth interview)

3.3.4 Disbursement of funds to approved facility accounts

With regard to this component of the DHFF programme, the results show that, respondents had mixed perspectives about disbursement of funds to the approved facility bank accounts. A number of participants reported that DHFF funds were timely deposited to facility bank accounts:

...” we are receiving the funds directly via our own facility accounts without any problem” (Doctor, in-depth interview).

The results also revealed that disbursement of funds sometimes was done late especially disbursement of basket funds and iCHF:

Funds are mostly late, the basket funds for instance can be late for the whole quarter and will be sent with the next quarter's funds, except from the NHIF funds comes in to the facility account on time, and then they give us a certain percent of what is earned each month.” (Clinical officer Bangata H.C, in-depth interview)

3.3.5 Provision of tools for the DHFF programme

Evidence from the study findings show that most of the facilities run a shortfall of some tools and equipment required for implementation of the DHFF:

... *“our facility has a Smartphone; we neither have a computer nor printers”* (Clinical officers-Bangata Health centre & Olgilai dispensary- in-depth interview, in-depth interviews)

3.3.6 Supportive supervision and mentorship

The result from this study demonstrated that supervision and mentorship was implemented to some extent. Some respondents reported that supervision and mentorship was sufficiently done:

We get supervision, when the health secretary makes her visits, she asks if there's any help we need and she helps. Also, the accountants are supportive, they show you when the money comes in (Clinical officer Bangata H.C-in-depth interview)

... *“Supervision and mentorship is not that much serious and I think it is because this programmes is still new to us”* (Doctor; Olgilai dispensary- in-depth interview).

3.4 Procurement practices in the context of DHFF

3.4.1 Procurement plans and decisions

In regard to procurement plans and decisions, the findings reveal that, implementation of the DHFF had increased autonomy within primary health facilities as it was hereby pointed out by many respondents:

... *“We can now plan, budget, and buy some items and even tools based on our own needs and preferences. This practice was quite different prior to the adoption of the DHFF.”* (FGD, Participant).

... *“the DHFF has a given us more power to handle our own issues including making purchases without having everything done for us”.* (Doctor: in-depth interview)

3.4.2 Procurement process and procedures

In regards to in procurement process and procedures; issues related to bureaucracy and monopoly by the Medical Store Department (MSD) emerged from the respondents:

there is a necessary condition that, drugs and other medical supplies must be purchased from one supplier (the MSD), unless otherwise, catalogue commodities are deem out of store is when a procuring entity will be given permission to purchase from a specified private dealer. When this situation happens, it delays the procurement process (Doctor: in-depth interview).

The findings also demonstrated existence of bureaucracy in the procurement process by the government officials and restrictions in making purchase in relation to implementation of the DHFF planned activities as described by some the respondents:

. When we plan and make a budget of items based on our needs and preferences, it sometimes happens that, when the list gets into the DMO office, some items are omitted and or replaced with something else; I think they also value more issues their priority (Doctor: in-depth interview).

3.5 Benefits/achievements of the DHFF programme

3.5.1 General impression of the benefits of the DHFF programme

It was found that, the benefits of the DHFF within public primary health facilities included; *first*, promoted facility's payments, including drugs, medical supplies, and other equipment, doing some minor renovations and paying employees' allowances. *Secondly*, fostered even distribution of resources between health facilities at local levels and those located in town, *thirdly*, enhanced transparent in using funds at the facility level. *Fourthly*, improved functioning of health facilities through being actively involved in decision making, planning, budgeting and improvement in documentation and *lastly*, increased funds allocated to the health facilities. These results are presented below:

3.5.2 Payments of the health facilities

There are some several benefits I can mention, we use money from DHFF to buy drugs and medical supplies, we are managing to purchase some equipment for cleanliness, also we have done some minor renovations for example construction of shelves for keeping drugs (Doctor; Olgilai dispensary, in-depth interview).

We are meeting the dispensary's specific needs that were never met, here we have built shelves, we have put notes boards that we did not have before, we also have constructed an incinerator. In addition, this program is really helpful we can use the funds to pay for allowances (Participant, FGD)

3.5.3 Distribution of resources

..... *“The health facilities at local levels are now similar to the ones located in town in terms of the availability of tools and other commodities items required for service provision.”* (Nurse, in-depth interview)

3.5.4 Transparency in using facility's funds

Description of the fund provided is well stipulated, whether it's for buying drugs or allowances and when the fund will be available. All of these issues are clearly indicated in the DHFF system, and even health workers at the dispensaries and health centre are well informed about these issues (Accountant at DC, in-depth interview).

3.5.5 Functioning of the health facilities

The results revealed that the programme had improved functioning of the public primary health facilities through active participation of healthcare providers in decision making, planning, budgeting and documentation.

3.5.6 Allocation of funds

Another participant reported that DHFF had led into increased allocation of funds at the public primary health facilities: *“Now we have more funds than what they assigned for us before.”* (Nurse, Bangata HC; in-depth interview)

3.6 Success of the DHFF programme with respect to its specific areas of focus

3.6.1 Structural quality of maternal and child health services

Construction of new health centres and dispensaries and also rehabilitations of buildings at the health facilities for example Nturuma, Mbuyuni and Mussa are using the DHFF, so in one way or the other the DHFF has contributed into improvement on structural quality of maternal and child health services”. (Accountant #2, DC: in-depth interview)

We buy medicines that improve haemoglobin level for pregnant women and soaps that are used after the mother has given birth. Also, we have built a placenta pit so the quality of maternal health is improved (Clinical officer Bangata H.C-in-depth interview)

3.6.2 Accountability and governance at the primary health care level

At the moment, people at the health facilities are more accountable than in the previous time because any activity they do is really reflected in the budget made by themselves, this makes them more concerned and hence more accountable for the actions they do (Accountant #2, DC: in-depth interview)

This programme has put some standards that I have to make sure I reach so that I can achieve what they call ‘star rate’, so I am now very accountable because I have to make sure I use the funds wisely to reach those standards or I will have to face the consequences of failing to adhere the set standards (Clinical officer Bangata H.C-in-depth interview)

3.6.3 Responsiveness of the health facility to patients receiving health care

..... *“The implementation of the DHFF has fostered timely and adequate availability of drugs at our health facility than before.”* (Nurse: in-depth interview).

We have bought some laboratory equipment that were not available and we were not able to give some health services previously as we are doing today (Doctor Ngaramtoni H C; FGD)

3.6.4 Service utilization and health seeking behavior

More people now come to the hospital we used to receive around 100 patients per month, now we receive 400 and more per month. Generally, the environment is more conducive and friendly for the patients (Doctor, Oldadai dispensary; in-depth interview)

3.7 Challenges facing the implementation of the DHFF in the primary facilities

3.7.1 Insufficient of human resource

lack of human resource especially staff responsible for financial management at the facility level.

... *“they have hired very few accountants compared to the facilities available, so it’s challenging to meet an accountant whenever you need one.”* (Clinical officer Bangata H.C, in-depth interview)

We the assistant accountants are overloaded; each of us has seven or eight facilities to provide accounting expertise... at least one accountant could have two or three facilities but eight is, honestly speaking, too much work (Accountant #3, in-depth interview)

3.7.2 Lack of tools and equipment

There were concerns from some participants that little DFF tools and equipment were available at the respective health facilities creating some difficulties processing and keeping the DHFF data.

.... *“Tools are lacking, some health facilities have no computers and printers as per the DHFF plan.”* (Accountant, in-depth interview).

3.7.3 Delay of disbursement of funds

A number of participants reported that release of DHFF funds to health facility bank accounts was always late. This delayed disbursement of funds to primary health facilities definitely affects the implementation of the DHFF planned the activities.

.... *“it is also very difficult when funds don’t come in on time you could be out of medicines and funds don’t come in that quarter.”*(Clinical officer Bangata H.C, in-depth interview)

.....*“Disbursement of fund is not well implemented; example the money from basket funds comes in late”.* (Doctor: in-depth interview)

3.7.4 Inadequate funds provided

The amount of money offered is not enough, on average each health facility receives only 1 to 1.2 million Tanzanians shillings as basket fund, what will you do with this amount of money! (Doctor; Olgilai dispensary, in-depth interview).

3.7.5 *Remoteness of some health facilities*

One respondent complained about geographical location of health facilities major concerns for some of health facilities being located in hard-to-reach areas and also having no internet access to operate the DHFF system.

3.7.6 *Lack of complete autonomy*

Regarding limitation of the using of DHFF funds:

If after budget there are funds that remain in your facility account, you are not allowed to use that fund, until in the next budget no matter the need that may emerge in between (Participant, FGD)

.... "Payment of extra duty for healthcare workers has not been taken into account in the DHFF programme." (Nurse: in-depth interview).

Furthermore, a concern about bureaucracy and lack of trust by the government officials were reported: *We plan our spending, and then we have to take the plan to the DMO's office and the director's office, where they sometimes limit us as to what we should omit from the plan or what to add. You may find some items are omitted and replaced with something else; I think they also consider their priority (Participant, FGD)*

I feel like the upper management thinks we cannot handle this thing alone, they are not sure that we can run things at the health centre our own way, so they don't really give us full autonomy. Sometimes I sense that they feel like we took what is theirs, 'the management of these funds', this situation is somehow challenging." (Doctor, in-depth interview)

In addition, monopoly by Medical Store Department (MSD) during procurement of drugs and medical suppliers was commonly reported. Issues of inadequate medical supplies and high prices of drugs from these suppliers were more common:

We are experiencing some troubles especially during procurement of drugs from the MSD; sometimes by the time we need to make purchases some of the drugs are out of store. However, it is mandatory to purchase drugs from only specified suppliers dominantly the MSD (Doctor, in-depth interview)

Medicines from recommended supplier are very expensive, almost three times more expensive than in other medical stores, so this is very challenging, they should give us more freedom as to what places we can purchase drugs from, as a matter of fact, there are no medicines most if the times from this supplier (Doctor Moivodispensary; FGD)

IV. DISCUSSION

4.1 *Perceptions towards the design and implementation of DHFF components*

According to the results, most of the study participants conveyed a generally positive perception concerning the design/plan and goal of the DHFF programme. The study also established that the majority the study participants hold a positive perception regarding the adoption of DHFF within the primary health facilities. In agreement with these study findings, Anokbongoet *al.* (2010) also found that majority of local level health providers had positive attitudes towards the implementation of like programme in Uganda.

The results also show that, few participants had a negative perception towards the DHFF with a main concern being a heavy workload brought by carrying out different activities attached to the DHFF programme. However, this could be reflected to inadequate workforce as some respondents reported that by the time of the study some facilities had only two or three healthcare workers. This result consistent with Opworaet *al.* (2009), who stated that interviewees in Kenya reported the DHFF programme resulted in a heavy workload for staff as a result of increased utilization of facilities.

The findings revealed contradicting perceptions regarding the implementation of DHFF key components by the participants. As far as provision of DHFF training and guidelines and tools were concerned, the study demonstrated that the adoption of DHFF was not accompanied by formal training to all healthcare workers who were involved in the DHFF implementation process. The results also revealed that dissemination of DHFF guidelines was implemented to few participants. In addition, evidence from the study findings show that most of the facilities run a shortfall of some tools and equipment required for implementation of the DHFF. A number of staffs who was also directly involved in implementing the DHFF confirmed not ever received any formal DHFF training, guidelines and tools/equipment something which might reflect that little attention have been invested in the aforementioned three important DHFF aspects by the CHMT. These results were similar to other studies done in other countries.

Regarding employing assistant accountants, the results revealed that, most of the participants perceived the employment of assistant accountants who are responsible for implementing DHFF to been inadequately adhered. These results reflected a shortage of accountants devoted to execute the DHFF programme.

Pertaining disbursement of funds to approved facility accounts, although some participants reported that DHFF funds were deposited to facility bank accounts as expected, the results also revealed that disbursement of funds were mostly late especially disbursement of basket funds and iCHF. This is similar to Antony et al. (2017) who conducted a study in Benin and found that implementation of the resource facility-

based financing scheme was limited by late feedback to facility staff, resulted in delays in bonus payment and restricted the potential to improve service delivery.

Concerning supportive supervision and mentorship, the findings demonstrated that supervision and mentorship was implemented to some extent. Some respondents reported that supervision and mentorship was sufficiently implemented while some respondents had a perception that supervision and mentorship component was not effectively implemented. These findings are in line with Regmiet *et al.* (2010) who found that lack of supportive supervision was perceived by health care providers as a challenge during implementation of a financial decentralization programme at the district levels in Nepal.

4.2 Procurement practices in the context of the DHFF

The study revealed that the implementation of the DHFF in the respective health facilities had brought positive changes over procurement function particularly on financial resources planning and decision making. A number of participants reported that the implementation of the DHFF had enhanced their decisions making on how we use the funds, enabling them to plan, budget, and buy some items and tools based on their own needs and preferences. The study agrees with the literature as was presented by Opwora *et al.* (2015) that direct health financing at primary health facilities affected purchasing arrangements by enabling frontline healthcare providers to have leverage over procurement decisions leading to prompt procurement of medicines, medical supplies and equipment.

In regards to in procurement process and procedures, issues related to bureaucracy and monopoly by the Medical Store Department (MSD) were emerged from the respondents. In accordance with the results, it was found that the MSD did not allow any procurement entity to go directly for private dealers without placing purchasing order to the MSD first. This monopoly by the MSD was reported to delay the procurement process which in turns implies that health facilities will have medicines and other commodities running out of stock now and then. Another concern in the procurement process was the bureaucracy by the government officials at the district level. It was found that some entities/commodities in the procurement list were omitted and sometimes replaced with different stuffs. These findings are similar to that one of Mapunda (2015) where cumbersome procurement process such as the complexity of the procurement process and the time taken to get through were pointed out by many respondents. The finding of this study also agrees with the literature as was mentioned by the MoHSW in its 2012/2013 report.

4.3 Benefits/achievements of implementing the DHFF at the health facility level

The findings indicated that implementation of DHFF promoted facility's payments, including drugs, medical supplies, and buying cleanliness equipment and notes boards, doing some minor renovations for example construction of shelves and incinerators. These findings validate previous study by Opwora *et al.* (2015) that making funds available to local level health institutions improved health service delivery through availability of drugs and equipment, funding facility's operating expenses as well as doing small renovations. The results of this study also demonstrated that the implementation of DHFF in the study area fostered even distribution of resources between health facilities at local levels and those higher levels. The study agrees with the literature as was presented by Nyamhanga *et al.* (2013) that sending funds direct to the health facility was reported to reduce financing inequalities between rural and urban districts. The same studies further indicated that, DHFF improved transparent in using funds and increased funds allocated to the respective health facilities. This result resembles to the findings by London (2013) which also revealed that direct health financing enhanced transparency to health care providers at local levels. This result also resembles to that reported by Mbogela and Mollé (2014) that flow of funds from central to local government level increased availability and accessibility of funds at lower levels. This is in line with Opwora *et al.* (2009) who reported that implementation of DHFF accounted for more than half of the facilities' annual income.

The study also established that the adoption of DHFF contributed into improvement of service provision at the public health facilities through its positive effects on structural quality of maternal and child health services, accountability and governance, responsiveness, service utilization and health seeking behaviour. These study findings agree with results of Regmiet *et al.* (2010), who found that financial decentralization in the health sector, brought positive influence on service access, and utilization and improved service delivery. Also, Kapologwe *et al.* (2019) illustrated that, implementation of the DHFF programme in Tanzania improved accountability among service providers and health system responsiveness in the country. As well a study by London (2013) which was carried out in Vietnam found that healthcare providers' autonomy imposed by direct health financing enhanced performance, increased responsiveness to local needs and improved health outcomes.

4.4 Challenges facing the implementation of the DHFF in the primary facilities

A number of challenges facing the implementation of DHFF were identified in this study. Human recourse specifically the accountant personnel were reportedly inadequate, as it was found that one assistant accountant was responsible to manage the funds at several facilities leading into poor management of the funds. Little DFF tools and equipment such as computers and printers were as challenges facing the implementation of the DHFF at the stud area. In addition, delay of disbursement of funds to the health facility bank accounts

remained common which definitely was attributed to poor implementation of the DHFF planned activities at the primary health facilities. Furthermore, DHFF fund provided was reportedly inadequate, which could not meet all the necessary expenses at the respective health facilities. Another challenge was weakness in the DHFF procurement system particularly absence of a local purchase order (LPO).

In addition, lack of internet connection and hard to reach areas due remoteness of some health facilities were identified. Finally, lack of complete autonomy was frequently reported by a number of respondents. Several concerns were identified which included strict conditions of where to purchase commodities commonly the MSD despite inadequate availability of and relatively high prices of medical supplies from this supplier and other few recommended private vendors. Also bureaucracy and lack of trust by the government officials at the district level leading into unnecessary delay and sometimes mismatch of commodities in the procurement list. The findings are in agreement with a study by Prashanth *et al.* (2014) reported that, among the major challenge facing the implementation of health programmes was inadequate resources including human, financial and materials. The study also agrees with the results documented by Antony *et al.* (2017) in Benin found that implementation of the resource facility-based financing scheme was limited by verification procedures at the district levels and late feedback to facility staff, resulted in delays in bonus payment and restricted the potential to improve service delivery.

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