The Functionality of Health Facility Governing Committees and Their Associated Factors in Selected Primary Health Facilities Implementing Direct Health Facility Financing in Tanzania

Anosisye Kesale (✉ akesale@mzumbe.ac.tz)

Mzumbe University

Christopher Mahonge

Sokoine University of Agriculture

Mikidadi Muhanga

Sokoine University of Agriculture

Research Article

Keywords: Health Facility Governing Committees, Primary Health Facilities, Direct Health Facility, Financing, Tanzania, Decentralization

Posted Date: January 5th, 2022

DOI: <https://doi.org/10.21203/rs.3.rs-1092885/v1>

License: © ⓘ This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Abstract

Background: Decentralization has dominated the agenda for the reforms of the organization of service delivery in Lower and Middle-Income Countries (LMICs). Decentralization faces a formidable challenge of fiscal decentralization in primary healthcare facilities. Of now, LMICs are implementing fiscal decentralization reforms to empower health facilities and their Health Facility Governing Committees (HFGCs). Given the paucity of the impact of fiscal decentralization, this study was conducted to assess the functionality of HFGCs and their associative factors in primary health care facilities implementing fiscal decentralization through Direct Health Facility Financing (DHFF) in Tanzania.

Methods: A cross-sectional design was employed to gather both qualitative and quantitative data. The study was conducted in 32 selected primary health facilities implementing DHFF in Tanzania. Probability and nonprobability sampling procedures were employed, in which a multistage sampling procedure was used to select 280 respondents. Data were collected through a structured questionnaire, in-depth interviews and focus group discussions. Descriptive analysis was employed to determine the functionality of HFGCs and binary logistic regression was employed to determine associated factors for the functionality of HFGC. Qualitative analysis was done through thematic analysis.

Result: HFGC functionality under DHFF has been found to be good by 78.57%. Specifically, HFGCs have been found to have good functionality in mobilizing communities to join Community Health Funds 87.14%, participating in the procurement process 85%, discussing community health challenges 81.43% and planning and budgeting 80%. The functionality of HFGCs has been found to be associated with the planning and budgeting aspects p-value of 0.0011, procurement aspects p-value 0.0331, availability of information reports p-value 0.0007 and Contesting for HFGC position p-value 0.0187.

Conclusion: The study has revealed that fiscal decentralization through DHFF significantly improves the functionality of HFGCs. Therefore, the study recommends more effort be put into facilitating the availability of finances to the health facilities.

1 Background Information

Community participation in Primary Health Care (PHC) is the cornerstone for attaining good health and people's well-being in all societies¹⁻³. Therefore, the attainment of good health, among others, depends on community participation in the planning and implementation of health service delivery at the primary health care facilities (PHC)⁴. Lower and Middle-Income Countries (LMICs) adopted community participation in health service delivery in primary health care through decentralization by devolution policies, which created Health Facility Governing Committees (HFGCs)⁵⁻⁷. The created HFGCs are devolved with specific functions and powers to perform in the course of governing primary health care facilities^{8,9}. LMICs are implementing different types of decentralization such as fiscal decentralization to primary health facilities and HFGCs to improve the health service delivery at the PHC¹⁰. It is assumed that

the more empowered and autonomous HFGCs and health facilities guarantee health system responsiveness to community needs and preferences ^{6,11}.

Empirical evidence suggests that user committees known as HFGCs provide the link between health care providers and communities ^{8,12}. In the primary health facilities, the HFGCs is responsible for providing leadership in holding service providers accountable, hence addressing the problem of misuse of resources, poor service provision, and poor health system responsiveness to the community ^{7,13}. The LMICs have assigned specific functions to be performed by HFGCs, such as managing finance and addressing community health challenges ^{12,14}. Despite some positive impacts of these HFGCs, studies have shown some functionality gaps with respect to HFGCs in overseeing the health facility operations. For instance, Boex *et al.* and WHO found weak participation of HFGCs members in planning and budgeting because HFGCs had weak fiscal power and authorities in Tanzania ^{15,16}. Abimbola *et al.* in Nigeria found that HFGCs were not performing well in their role because some members did not know their role and had limited fiscal power and authority to manage facility resources ¹⁷. To unlock the HFGCs functionality gaps, the literature suggests the implementation of full decentralization (fiscal, political, and administrative) at primary health care facilities ^{7,18–20}. Currently, some LMICs are implementing fiscal decentralization through various arrangements in primary health facilities among other things to empower and improve HFGCs' functionality.

The empowerment Framework perspective entails that the capacity of an individual or group to make an effective choice is influenced by agency and opportunity structure. Agency entails the ability of the individual or group to make a meaningful decision which is predisposed by age, material ownership, skills, experienced, and education level. Opportunity structure refers to the formal or informal context in which individuals or groups operate, which is influenced by norms, availability of finance, availability rules, and regulations. Fiscal decentralization is expected to provide a conducive context/environment for HFGCs to accomplish their devolved functions. The fiscal can provide Context enhances individual or group capacity to transform the agency into meaningful choices ^{21,22}

In Tanzania, HFGCs was introduced in 1999 as a part of Health Sector Reforms (HSRs) purposefully to strengthen community participation in the administration and management of primary health care facilities ²³. These HFGCs are composed of community members who are either elected by or appointed from their communities. These HFGCs are devolved to the following functions; Participate in preparing the facility plans and budget to manage facility income, expenditure, and facility performance. Similarly, to mobilize finances to manage construction and maintenance. Moreover, discussing and addressing the challenges confronting the community and mobilizing the community to join improved Health Community Fund ^{23,24}. However, empirical evidence suggests that the performance of HFGCs in accomplishing their functions before 2018 was low ^{16,25}. The cited reason for the weak functionality of HFGCs was inadequate fiscal power and autonomy to control and timely access health facility financial resources ^{15,23,26}. This is because all primary health care facility planning and financial resources were managed and controlled by the District Medical Officers (DMOs) at the district council level ¹⁵. Indeed,

facility finance from the Ministry of Finances (MoF) and other sources such as user fees was deposited into council health accounts.

In 2017/18 by introduced the Direct Health Facility Financing arrangement in all public primary health facilities. The DHFF was introduced to improve the performance of the primary health care system²³. Under the DHFF arrangement, intergovernmental transfers for health and other funds from development partners are directly deposited to the health facility bank accounts²⁷kesale. The DHFF arrangement grants service providers and HFGCs autonomy to plan, budget and manage facility finances to improve health services delivery²³. Despite all these efforts of the government in implementing DHFF in primary health facilities, the current functional status of HFGCs in primary health facilities implementing DHFF is not empirically known. This does not compare the functionality of HFGCs before and after DHFF introduction, however, the study assesses the functionality status of HFGCs in selected primary health facilities implementing DHFF in Tanzania.

Figure 1 indicates the conceptualization of the interaction between the HFGCs characteristics and DHFF context and its influence on the functionality of HFGCs. From Figure 1, the assumption is that the functionality of HFGCs depends on the HFGCs members' characteristics such as their education level, experience, profession, leadership, selection, and composition of the members. The fiscal decentralization context (DHFF) in which the HFGCs operate provides a conducive environment for HFGCs to perform their devolved functions. It is expected that DHFF offers the following to the HFGCs; timely availability of finance, guidelines on the use of finance, and training to the HFGC on their roles and financial management. Furthermore, the DHFF context is expected to clarify the powers and mandates of HFGC in the process of performing their roles and responsibilities.

2 Methods

Methods and Approaches

A cross-sectional design was employed in which both qualitative and quantitative data were collected simultaneously. The study was conducted between February and Mei 2021 in all four regions.

Sample size and sampling procedure

A total sample size of 280 respondents was used in this study. A multistage sampling procedure was employed in selecting the sample size of this study based on the Star Rating Assessment conducted in early 2018 by the Ministry of Reginal Administration and Local Government to all public primary health facilities in Tanzania. Star Rating Assessment was introduced by the government of Tanzania to measure the performance of primary health facilities including the functionality of HFGCs. The assessed primary health facilities and their HFGC were ranked to determine the low and high performing health facilities and HFGCs ²⁸. Star rating assessment of 2017/18 has been taken as a baseline because it is in the same year DHFF was introduced ^{6,29}. The first stage involved the selection of four regions in which

two regions (Kilimanjaro and Mbeya) were the regions that had the majority of HFGCs with high performance and two regions (Ruvuma and Songwe) with the majority of HFGCs with low performance. The second stage involved the purposive selection of eight councils from four regions. Two councils were selected from each region in which low-performing and high-performing councils were purposively selected. The third stage was the selection of 32 public primary health facilities in which four health facilities were selected from each council, The facilities were stratified based on their homogeneity of the study units i.e., health centers versus dispensaries. Therefore, two health centers and two dispensaries were purposively selected based on the performance of their HFGCs (low and high), making a total number of 32 primary health facilities from regions, i.e., 16 being high-performing HFGCs and 16 low performing HFGCs. In stage four, 9 respondents were from each health facility selected in stage three. A proportional sampling was used to select HFGCs members.

Data Collection

Quantitative data were collected from each selected member of HFGCs through the closed-ended structured questionnaire based on specific HFGCs functions. The data collection software (database) was created by using Open Data Kit software (ODK). Then all data collected were entered in the ODK. A mobile data collection (MDC) quantitative approach was employed to collect data. After data was collected through mobile phones then were sent to the central server. Four research assistants attended three days of training on mobile data collection skills and techniques which was followed by pre-testing of the imparted skills in selected facilities that were out of the study area. The data collected were sent to the researcher through the ODK platform. As a part of quality control, all selected facilities had GPS coordinates therefore all research assistants used tablets that had GPS sensors. The response rate for HFGCs who filled the questionnaire was 280 respondents out of 288. Qualitative data were collected through in-depth interviews that were conducted with HFGC chairpersons and Focus Group discussions (FGDs) that involved all selected Hfgc members. Research assistants under went training on the interview guide and FGDs guide before the start of data collection. The qualitative data collection tools were pretested before going to the study area. The interview guide had 21 questions regarding the functionality and governance of HFGC. The interview guide was composed of 11 questions which were all about the governance of HFGC and functions of HFGCs. A total number of 14 interviews were conducted with HFGCs chairpersons and 13 FGDs having 6 to 9 participants were conducted. The number of interviews and FGDs ended after reaching the saturation point. HFGC members were asked what were their roles in each function or task assigned to them, whether they have been accomplishing it or not, and how they have been accomplishing it. Interviews and FGDs were conducted in the prepared rooms which were free for the participants to freely talk without interference.

Quantitative Analysis

Analysis was done using Statistical Product and Service Solution (SPSS) statistical software (version 25). The significance of all statistical tests was determined at a 5% level. Descriptive and inferential statistics were used to analyze data, Frequency tables and bar graphs were used to describe the sample

and the characteristics of the participants. Since the outcome variable was dichotomized (0=poor function, 1=Good function), a binary logistic regression model was used to determine factors associated with HFGC functionality³⁰. The general multiple logistic regression models are given as:

$$\text{logit}[\pi(x)] = \log\left(\frac{\pi(x)}{1-\pi(x)}\right) = \beta_0 + \beta_1 x_1 + \dots + \beta_p x_p$$

Where, $\pi(x)$ is the likelihood of HFGC functionality is "good function", x_i 's are set of independent variables and β_i 's are their respective parameters³¹. The results of the model are presented in the form of a regression parameter estimate and estimated odds ratios (OR). The estimated OR, determined by taking the exponent of the regression parameter estimates, shows the increase or decrease in the likelihood of having good functionality at a given level of the independent variable as compared to those in the reference category. An estimate of OR > 1 indicates that the likelihood of having good functionality for participants at a given level of the independent variable is greater than that for the reference category. Similarly, an estimate of OR < 1 specifies that the chance of being having good functionality at a given level of the independent variable is less than that for the reference category.

Variables of the study

The dependent variable for this study was the functionality of HFGC. The Functionality of HFGCs in primary health facilities implementing DHFF was statistically analyzed based on the experience of HFGC members in accomplishing their assigned functions as indicated in the four points Likert Scale in which each point was in percentage. Then, the four points Likert scales were dichotomized for further analysis. The first two points namely "Very Low" and "Low" were coded 0 and "High" and "Very High" were coded 1. the score of functionalities was calculated by summing up all dichotomized variables. The possible minimum score was 0 and the possible maximum score was 9. The functionality score was categorized into two categories those who scored above the median (5) were regarded as good functioning while those who scored 5 or less were regarded as poor functioning. This practice is consistent with the analysis conducted in the study of health system responsiveness conducted in Tanzania²⁴. The independent variables for this study included nine (9) items (functions) which determined the functionality of HFGCs as indicated in table 3.

Qualitative Analysis

A total of 14 in-depth interviews and FGDs were audiotaped, transcribed verbatim, and anonymized for analysis. After data collection that is based on thematic areas, the thematic framework was used as the theoretical framework to analyze the data of HFGCs. Four researcher assistants independently coded the material, and then the researcher reviewed the coded material, subcategories and categories to establish key findings. Therefore, the statement relating to the experience of HFGC members' participation in

different functions of HFGC was analyzed to determine the functionality of HFGCs and helped to assess whether the argument of the empowerment framework was relevant or not.

Reliability

Generally, many quantities of interest in social sciences and other fields, such as anxiety or job satisfaction, are impossible to measure explicitly. In such cases, we ask a series of questions and combine the answers into a single numerical value. However, when items are used to form a scale they need to have internal consistency. In this study, Cronbach’s alpha was computed to examine the internal consistency or reliability of our instrument. It measures how well a set of variables or items measures a single, one-dimensional latent aspect of individuals. The Cronbach’s alpha values range from 0 to 1, and the values above 0.7 represent an acceptable level of internal reliability. Table3 presents Cronbach’s alpha values and the number of items joined for each factor. The Cronbach’s alpha value for the 9 specific functions of HFGCs is 0.922. This indicates that there is a high level of internal consistency for our scale

Ethical Approval

This study was conducted in accordance with the principles of the Declaration of Helsinki. All methods were carried out in accordance with relevant guidelines and regulations. The study was approved by the Sokoine University of Agriculture IRB. The IRB with the number SUA/ADM/R. 1/8/668 was sought from the Sokoine University of Agriculture. The permit was then submitted to the President's Office Regional Administration and Local Government (PO-RALG) to be permitted to research local government authorities. PO-RALG offered a permit with registration number AB.307/323/01 to allow the research to research the selected regions. Informed consent was obtained from all human participants of this study by completing the consent forms before they were involved in the study.

3 Findings And Discussion

Socio-Demographic Characteristics

Table 1: Socio-Demographic characteristics of HFGC members No=280

Variable	Frequency	Percent
Age		
<30	32	11.43
31-45	100	35.71
46-60	107	38.21
61+	41	14.64
Sex		
Male	139	49.64
Female	141	50.36
Education level		
Primary	150	53.57
Secondary	64	22.86
Certificate	24	8.57
Diploma	30	10.71
Advanced diploma	5	1.79
University degree	7	2.50

Table 1 presents the socio-demographic characteristics of the participants of this study. The social demographic characteristics of this study age of the members of HFGC was measured in years, the sex of the members was categorized in male and female, and the educational level of members was categorized in primary school. Secondary school, certificate, diploma, advanced diploma, and university degree.

Table 2: Number of Participants as per Region, type of facility, and Position N=280

Variable	Frequency	Percent
Region		
Kilimanjaro	93	33.21
Mbeya	64	22.86
Songwe	54	19.29
Ruvuma	69	24.64
Type of Health Facility		
Dispensary	161	57.50
Health center	119	42.50
Position		
Chairperson	43	15.36
Secretary or facility in charge	34	12.14
Member of the HFGC	203	72.50

Table 2 indicates the characteristics of the participants of the study. The participants of the study were based on the regions in which we had Mbeya, Kilimanjaro, Songwe, and Ruvuma, the types of health facilities were categorized into health centers and dispensaries, position the member was categorized into a chairperson, secretary and a normal member.

The Functionality of HFGC under Direct Health Facility Financing (DHFF) Context

Table 3: HFGC functioning in various areas under decision making under DHFF, n=280

Variable (Specific Function of HFGCs)	Poor Functionality (%)	Good Functionality n (%)	Mean (SD)
Participate in Preparing facility plan and Budget according to community needs	56(4)	224(80)	3.91(0.92)
Managing facility income and expenditure	63(22.49)	217(77.5)	3.88(1.03)
Participate in managing the procurement of health equipment, drugs and services	42(15)	238(85)	4.00(0.88)
Participate in managing facility performance	80(28.57)	200(71.43)	3.73(1.05)
Management of facility resources	63(22.49)	217(77.5)	3.90(0.95)
Mobilization of facility finances from different sources	118(32.13)	162(57.86)	3.49(1.05)
Participate in managing constructing facility infrastructures	70(25)	210(75)	3.79(1.05)
Discussing the challenges confronting the community	52(18.57)	228(81.43)	3.96(0.87)
Mobilizing community to join improved Health Community Fund	36(12.86)	244(87.14)	4.23(0.87)
Overall HFGCs Functioning	60(21.43)	220(78.57)	3.86(0.79)

Table 3 indicates the HFGCs members' experience on their functioning among 9 key functions devolved to HFGCs in Tanzania. The HFGCs members were supposed to indicate the extent to which their HFGC has been participating in each function in their primary health facility under the DHFF context in Tanzania.

Factors Associated with the functionality of HFGCs under DHFF Context

As presented in the methodological section binary logistic analysis was used to assess factors associated with the functionality of HFGCs as presented in the methodological section. The result shows that In unadjusted analysis, the functionality of HFGCs was significantly associated with the region ($p=0.0456$), Age of respondents ($p=0.0272$), Education level ($p=0.0135$), Governance ($p=0.0086$), Health Planning aspects ($p<.0001$), Financial management aspects ($p<.0001$), Procurement Aspects ($p<.0001$), Informational reports ($p<.0001$), Measures taken by HFGC ($p=0.0287$), Quality ($p<.0001$) and Important ($p=0.0032$). After adjustment of variables, it was revealed that the functionality of HFGCs was significantly associated with Contesting position, Health Planning aspects, and Procurement Aspects and Informational reports (table 4). With respect to Contesting position, the result showed that those HFGCs members who had contesting positions were significantly more likely to have high functionality at their

health facilities as compared to those who had no contesting position (AOR=6.413, p=0.0187). With regard to Health Planning aspects, it was noted that those respondents who had good planning were significantly more likely to have good functionality as compared to those who had poor planning aspects (AOR=10.325, p=0.0011). As compared to those respondents who reported to have poor procurement aspect, those respondents who reported to have good procurement aspect were significantly more likely to have high functionality (AOR=4.986, p=0.0331). With respect to Informational reports, those HFGC members who reported to have good information reports were significantly more likely to have high functionality as compared to their counterparts [(AOR=10.387, p=0.0007)], see table 4].

Table 4: Factors associated with the functionality of HFGCs

Variable	Unadjusted logistic regression		Adjusted logistic regression	
	OR[95%CI]	p-value	AOR[95%CI]	p-value
Region				
Kilimanjaro	5.137[1.033, 25.551]	0.0456	1.950[0.303, 12.531]	0.4817
Mbeya	0.136[0.054, 0.343]	<.0001	8.580[0.982, 74.960]	0.0519
Songwe	0.113[0.044, 0.291]	<.0001	6.416[0.854, 48.195]	0.0708
Ruvuma	Reference		Reference	
Age				
<30	Reference		Reference	
31-45	0.966[0.410, 2.277]	0.9368	1.017[0.233, 4.431]	0.9823
46-60	2.105[0.859, 5.163]	0.1038	2.115[0.421, 10.623]	0.3629
61+	4.203[1.176, 15.025]	0.0272	1.536[0.213, 11.061]	0.6699
How selected				
Elected	Reference		Reference	
Appointed	0.639[0.351, 1.165]	0.1441	2.987[0.637, 14.004]	0.1651
Contesting position				
No	Reference		Reference	
Yes	1.775[0.989, 3.187]	0.0546	6.413[0.749, 30.191]	0.0187
Education level				
Primary	Reference		Reference	
Secondary	1.799[0.876, 3.693]	0.1097	1.683[0.506, 5.592]	0.3957
Certificate	1.577[0.554, 4.489]	0.3931	4.080[0.747, 22.276]	0.1045
Diploma or above	3.942[1.327, 11.706]	0.0135	6.145[0.749, 50.430]	0.0909
Governance				
Poor	Reference		Reference	
Good	3.372[1.362, 8.349]	0.0086	0.621[0.100, 3.870]	0.6100
Health Planning aspects				
Not good	Reference		Reference	
Good	30.794[14.812,	<.0001	10.325[2.540,	0.0011

	64.020]		41.972]	
Financial management aspects				
Poor	Reference		Reference	
Good	17.745[8.959, 35.148]	<.0001	1.056[0.264, 4.223]	0.9386
Procurement Aspects				
Poor	Reference		Reference	
Good	23.364[11.497, 47.481]	<.0001	4.986[1.138, 21.858]	0.0331
Informational reports				
Poor	Reference		Reference	
Good	36.127[14.675, 88.936]	<.0001	10.387[2.671, 40.391]	0.0007
Measures were taken by HFGC				
Poor	Reference		Reference	
Good	3.882[1.152, 13.086]	0.0287	0.463[0.097, 2.203]	0.3335
Quality				
Poor	Reference		Reference	
Good	12.812[5.712, 28.739]	<.0001	1.922[0.592, 6.241]	0.2769
Important				
Poor	Reference		Reference	
Good	4.162[1.612, 10.744]	0.0032	0.964[0.155, 6.000]	0.9683

The autonomy and powers of HFGCs

Participants had the view that the level of HFGCs and fiscal powers of HFGCs are high under DHFF implementation. The participants felt that the DHFF arrangement has provided more space for HFGC's participation in planning and budgeting accessing financial resources. All these have eased the process of allocating and controlling the use of allocated resources. For instance, one of the HFGC chairpersons had the following response.

“Under DHFF arrangement member of HFGCs, we are comfortable with exerting of power in different dimensions.... It is very easy now to do what HFGC is required to do because we have all powers now”

(HFGC Chairperson, Chunya DC- 13, February 2021)

Mobilization of community to join Community Health Insurance

Participants involved in the depth interviews have revealed that under the DHFF arrangement, HFGCs have been participating much in mobilizing communities to join CHF. They cited different mechanisms used to mobilize community members to join CHF such as village meetings, religious congregations and burial ceremonies. This also was revealed through in-depth interviews with the HFGCs chairperson.

“As we are speaking, CHF education is being provided to the community members, we members were divided into different groups and approached the churches found in our ward for sensitizing the community to join CHF. We have been also sensitizing communities through visiting their hamlets” (HFGC Chairperson – Madaba District Council, February 2021)

Participants also highlighted the challenges facing the mobilization of community members to join CHF in many localities. Despite their commitment to this role, participants, however, responses from FDGs claimed that the number of community members joining the improved community health fund is not promising compared to the efforts exerted

“The challenge we encounter now is the number of community members joining the CHF is very low compared to the efforts we have put in sensitizing the community about the importance of being a member of CHF.”

Participation in Planning and budgeting process

It was revealed that the level of HFGCs participation in planning and budgeting is high in DHFF implementation. Participants felt that under DHFF they are no longer waiting for planning to be done at the council level. they revealed that they have been engaging much in the planning process through HFGCs meetings and some members are engaged through the planning committee. FDGs participants explained the extent they have been participating in different functions including financial related roles. One of the members of the FDGs had the following to say.

“We are currently able to control and monitor funds used in our facilities because we participate in deciding the use of facility funds... as HFGC chairperson, I make sure whatever we endorse to be used should also appear in the health facility plan and should be budgeted too” (HFGC Member- Madaba District Council-14 February 2021)

Procurement of Medicine and Medical commodities

Participants had the view that they are comfortable with their participation in the procurement of medicines and other services and goods under DHFF implementation. They described the manner they have been participating in the process as through identifying medicines required to be bought, approving the use of funds for procuring medicines and other commodities. Also, they reported having engaged in

receiving goods and services procured. As it was also found through Focus Group Discussion (FGDs) on the procurement process.

.....when the health facility in charge wants to buy anything she informs us as committees, therefore we revisit our health plan and budget to see if such an item was planned to be procured....

Another one added

..... The problem comes when we receive medical commodities sometimes we get stuck on the standard and quality of the materials that are to be received because we don't know how to go through them.....

Financial Management

Participants were of the view that they have been participating fully in managing health facility finances under DHFF. They mentioned HFGCs meeting as a decision space that they have been using to discuss and make decisions about financial management. However, they cited some areas that they are not doing well such as mobilizing finances from other sources apart from government, health insurance and out-of-pocket/user fees.

..... In our facility, we haven't identified or solicited any other sources of finance than user fees, improved community health funds and National Health Insurance Funds... we didn't know if we were responsible for going out of what we have... (HFGC Member 2 Tunduma Town Council, March 2021)

Communication between HFGCs, Health Workers and Community

Participants through in-depth interviews and FGDs had a positive view about their relationship with health workers and communities. agreed that they have had regular communication with health workers and communities to identify the community's challenges. They have been working together with health workers to address them in several ways such as health plans and forwarding them to village governments. One of the respondents had this to say

"We communicate with communities through several ways such as attending village assembly, meeting with individuals who have experienced some challenges in accessing health services... then we work closely with health works to address those challenges"

4 Discussion

The focus of this study was to assess the functionality of HFGCs and their associated factors in selected primary health facilities implementing DHFF in Tanzania. Generally, the study has found good functionality of HFGCs in selected primary health facilities implementing DHFF in Tanzania. The study has also have found that the functionality of HFGCs in primary health facilities implementing DHFF is significantly associated with contesting the position, participation in health planning and budgeting,

participation in procurement process/aspects and discussion of different informational reports tabled in HFGC meetings.

Interestingly, prior to DHFF implementation in primary health facilities, participants revealed that had only political powers to make a decision but they were lacking fiscal powers to enforce their decisions. This is because fiscal powers were still at the council levels therefore primary health facilities plans and budgets and procurement processes were controlled by the council levels. HFGCs had no powers and autonomy of influencing financial decisions based on community challenges. However, through the introduction of the DHFF arrangement health facilities and HFGCs are well controlling the operations of the health facilities. The DHFF has provided space for the HFGCs to participate in the planning and budgeting process because under DHFF planning and budgeting process is no longer conducted at the council level. the HFGCs is currently responsible for endorsing all expenditure for procuring facility medicine and other goods and services. Indeed health facilities management is required to present quarterly financial, operational and implementation of facility plan progress to the HFGC. Therefore the HFGCs have an opportunity for getting all information on facility operations and discuss them to improve health service delivery. These results support the association between the capacity of the group to make effective decisions and the informal and formal context in which the group/HFGC operates as provided by empowerment framework^{21,22}.

Furthermore, as found in other studies or literature, ^{2,14,32} community participation through community governing structures is a cornerstone for improving health services delivery at the primary health care facilities in lower and middle-income countries. Political and administrative decentralization is not likely to be effective and influence community participation in the governance and controlling health service delivery at the catchment areas if are not simultaneously implemented with fiscal decentralization ^{33–35}. The findings of this study support this relationship between the functionality of community health structures such as HFGCs and the fiscal decentralization through DHFF arrangement. This study has found that through fiscal decentralization under the DHFF arrangement, HFGCs are empowered with fiscal powers and autonomy to govern primary health care facilities.

Under DHFF implementation HFGCs are functional because they have been given opportunities to participate in planning and budgeting, procurement process of medicines, medical commodities, services and through different operational reports presented to the HFGC meetings by the health facility management. Through the context provided by the DHFF arrangement, HFGCs can communicate with communities and discuss and address communities health challenges through HFGCs meetings. Other community health challenges are placed into health facility plans and budgets for addressing them. As participants agreed that under DHFF arrangement, HFGCs receive all quarterly operational reports as required by DHFF guidelines, this helps HFGCs to be more updated about their health facilities. All these were not adequately done or conducted before DHFF implementation.

Likewise, the findings of this study are in line with empirical evidence found from studies conducted in other countries which have also implemented fiscal decentralization through DHFF such as Kenya which

found improvement of HFGCs performance after implementing this kind of fiscal decentralization^{14,36–38}. However, other countries which implemented fiscal decentralization in primary health care facilities but still the functionality of HFGCs was still poor. For instance, fiscal decentralization was implemented in Burundi primary health facilities but the HFGCs functionality did not improve³⁹. This implies that how fiscal decentralization is implemented may yield different results as it has happened in Kenya and Tanzania which implemented through DHFF arrangement while Burundi implemented through payment for results.

In addition, HFGCs have been found to have a variety of performances in different functions devolved to them. As indicated in table 3, HFGCs have been found to have relatively high functionality in mobilizing the community to join community health funds, discussing and addressing community health challenges, participating in the procurement process, planning and budgeting. This might be contributed by the context provided by the DHFF in which HFGCs and facility staff are required to collectively collect community health challenges and address them through facility plans and budget⁴⁰. These findings are contrary to findings found in other studies before DHFF implementation in Tanzania which found low participation of HFGCs in discussing and addressing community health challenges, low participation of HFGCs in the planning process even in attending HFGCs meetings^{13,19,41}.

The study potentially has highlighted the importance of empowering sub-national health institutions particularly community governing structures such as HFGCs through fiscal decentralization. As suggested by the empowerment framework, improving the context in which actors operate such as using the DHFF arrangement does improve the functionality of HFGCs hence strengthening community participation in managing and controlling health service delivery. This is influenced by the fact that factors found to be associated with HFGCs are those which are requirements of DHFF. As DHFF required HFGCs to participate in planning and budgeting, procurement process and requires health facility management to present quarterly reports to HFGCs Meetings to ensure transparency and smoothly functioning of HFGCs. These findings are contrary to findings of other studies which found gender, educational levels, experience and leadership of HFGCs to be the factors influencing HFGCs performance^{1,6,42–44}.

5 Conclusion

This study contributes to the body of knowledge and policy debate on the implementation of fiscal decentralization through DHFF in lower and middle-income settings drawing experience from Tanzanian local government authorities. The study has revealed that the DHFF context has improved the functionality of HFGCs in carrying out their devolved roles and powers. Despite revealing the good functionality level of HFGCs under the DHFF, the drawn lesson from this study is that the availability of finances and empowering HFGCs with fiscal power and responsibilities is essential for leveraging their functionality level. For more successful and effective functioning of the HFGCs, the study recommends having a continuous capacity-building program for members of HFGCs on their roles and powers. Furthermore, identifying a stable source of funds for paying HFGC members to strengthen their

attendance at HFGC meetings and activities. Lastly, the government should ensure timely availability of finance to the facility to enable HFGC to manage operations of the facility.

Declarations

Consent for publication

Not applicable

Availability of Data and Materials

All data generated or analysed during this study are included in this published article and supplementary file

Acknowledgment

We thank all participants of this study.

Funding

No funding was received for this study

Competing interests

No competing interest

Contribution

AK and MM were responsible for the conception of this study, research design, data collection, data analysis and writing the final draft. CM was responsible for the overall leadership of the team (setting the direction and planning) and the review of every part of the manuscript. All authors were responsible for the recruitment of research assistants and review of the final draft for submission.

Ethics approval and consent to participate

This study was conducted in accordance with the principles of the Declaration of Helsinki. All methods were carried out in accordance with relevant guidelines and regulations. The study was approved by the Sokoine University of Agriculture IRB. The IRB with the number SUA/ADM/R. 1/8/668 was sought from the Sokoine University of Agriculture. The permit was then submitted to the President's Office Regional Administration and Local Government (PO-RALG) to be permitted to research local government authorities. PO-RALG offered a permit with registration number AB.307/323/01 to allow the research to research the selected regions. Informed consent was obtained from all human participants of this study by completing the consent forms before they were involved in the study.

References

1. Gurung, G., Derrett, S., Hill, P. C. & Gauld, R. Nepal's Health Facility Operation and Management Committees: Exploring community participation and influence in the Dang district's primary care clinics. *Prim. Heal. Care Res. Dev.* **19**, 492–502 (2018).
2. WHO-Unicef. ALMA-ATA Primary Health Care. *Int. Conf. Prim. Heal. Care* 63 (1978).
3. World Health Organization (2018). A Vision for Primary Health Care in the 21st Century. *World Heal. Organ.* (2018).
4. Kessy, F. L. Improving Health Services through Community Participation in Health Governance Structures in Tanzania. *J. Rural Community Dev.* (2014).
5. McNatt, Z. *et al.* Implementation of hospital governing boards: Views from the field. *BMC Health Serv. Res.* **14**, (2014).
6. McCoy, D. C., Hall, J. A. & Ridge, M. A systematic review of the literature for evidence on health facility committees in low- and middle-income countries. *Health Policy Plan.* **27**, 449–466 (2012).
7. Kesale, A. M. Decentralization by Devolution; Perceptions of Councilors on the Level of their Decision Making Authority in Local Government Experience from Tarime Town Council. *J. Public Adm. Gov.* **6**, 1 (2016).
8. Mabuchi, S., Sesan, T. & Bennett, S. C. Pathways to high and low performance: factors differentiating primary care facilities under performance-based financing in Nigeria. 41–58 (2018) doi:10.1093/heapol/czx146.
9. Muhanga, M. I. & Malungo, J. R. Health Literacy and Some Socio-Demographic Aspects under One Health Approach in Eastern Tanzania: Connections and Realities. **1**, 89–100 (2018).
10. Kapologwe, N. A. *et al.* Understanding the implementation of Direct Health Facility Financing and its effect on health system performance in Tanzania: A non-controlled before and after mixed method study protocol. *Heal. Res. Policy Syst.* **17**, 1–13 (2019).
11. Cobos Muñoz, D., Merino Amador, P., Monzon Llamas, L., Martinez Hernandez, D. & Santos Sancho, J. M. Decentralization of health systems in low and middle income countries: a systematic review. *Int. J. Public Health* **62**, 219–229 (2017).
12. Njoroge, R. *et al.* “It's like these CHCs don't exist, are they featured anywhere?": Social network analysis of community health committees in a rural and urban setting in Kenya. 1–19 (2019).
13. Maluka, S. O. & Bukagile, G. Community participation in the decentralised district health systems in Tanzania: why do some health committees perform better than others? *Int. J. Health Plann. Manage.* **31**, E86–E104 (2016).
14. Waweru, E. *et al.* Are Health Facility Management Committees in Kenya ready to implement financial management tasks Findings from a nationally representative survey. *BMC Health Serv. Res.* **13**, 1 (2013).
15. Boex, J., Fuller, L. & Malik, A. Decentralized Local Health Services in Tanzania. *Urban Inst.* (2015).
16. WHO. Fiduciary Performance and Significant Fiduciary Risks Financial Management Risk C. (2015).

17. Abimbola, S. *et al.* 'The government cannot do it all alone': Realist analysis of the minutes of community health committee meetings in Nigeria. *Health Policy Plan.* **31**, 332–345 (2016).
18. Sakyi, E. K., Awoonor-Williams, J. K. & Adzei, F. A. Barriers to implementing health sector administrative decentralisation in Ghana: A study of the Nkwanta district health management team. *J. Heal. Organ. Manag.* **25**, 400–419 (2011).
19. Shayo, E. H. *et al.* Challenges to fair decision-making processes in the context of health care services: A qualitative assessment from Tanzania. *Int. J. Equity Health* **11**, 1–12 (2012).
20. Meyer, E., Thomas, L., Smith, S. & Scheepers, C. South African health decentralisation: requiring contextually intelligent leaders. *Emerald Emerg. Mark. Case Stud.* **7**, 1–23 (2017).
21. Alsop, R. & Heinsohn, N. Measuring empowerment in practice: Structuring analysis and framing indicators. *World Bank Policy Res. Work. Pap.* 3510 123 (2005) doi:10.1037/e596892012-001.
22. Raich, U. Fiscal Determinants Of Empowerment. *Policy Res. Work. Pap.* 39 (2005) doi:doi:10.1596/1813-9450-3705.
23. Kapologwe, N. A. *et al.* Understanding the implementation of Direct Health Facility Financing and its effect on health system performance in Tanzania: a non-controlled before and after mixed method study protocol. *BMC Health Serv. Res.* 1–13 (2019) doi:https://doi.org/10.1186/s12961-018-0400-3.
24. Kapologwe, N. A., Kibusi, S. M., Borghi, J., Gwajima, D. O. & Kalolo, A. Assessing health system responsiveness in primary health care facilities in Tanzania. *BMC Health Serv. Res.* **20**, 1–10 (2020).
25. Bakalikwira, L., Bananuka, J., Kigongo, T. K. & Mukyala, V. Accountability in the public health care systems: A developing economy perspective Accountability in the public health care systems: A developing economy perspective. *Cogent Bus. Manag.* **57**, (2017).
26. Kuwawenaruwa, A. *et al.* Bank accounts for public primary health care facilities: Reflections on implementation from three districts in Tanzania. *Int. J. Health Plann. Manage.* **34**, e860–e874 (2019).
27. Kesale, A. M. Selected Experiences of the Use of the Village Assembly in the Governance at the Grassroots Levels in Ludewa District Council in Tanzania. **7**, 1–11 (2017).
28. Yahya, Mohamed, M. Comment Raising a mirror to quality of care in Tanzania: the five-star assessment. 1155–1157 (2018) doi:10.1016/S2214-109X(18)30348-6.
29. Lodenstein, E. *et al.* " We come as friends ": approaches to social accountability by health committees in Northern Malawi. **2**, 1–14 (2019).
30. Julie, P. *SPSS Survival Manual A step by step guide to data analysis using SPSS for windows (Version 12)*. (Open University Press, 2005).
31. Delwiche, L. D. & Slaughter, S. J. *The little SAS book*. (SAS Institute Inc., SAS Campus Drive, Cary, North Carolina 27513, 2003).
32. Lodenstein, E. *et al.* Social accountability in primary health care in West and Central Africa: exploring the role of health facility committees. 1–15 (2017) doi:10.1186/s12913-017-2344-7.

33. The World Bank. Fiduciary Systems Assessment Tanzania – Strengthening Primary Health Care Services for Results. (2015).
34. Smoke, P. Decentralisation in Africa: Goals, dimensions, myths and challenges. *Public Adm. Dev.* **23**, 7–16 (2003).
35. Fjeldstad, O., Henjewe, F., Mwambe, G., Ngalewa, E. & Nygaard, K. Local government finances and financial management in Tanzania with Local government finances and financial management in Tanzania. *Hum. Rights* 2000–2003 (2004).
36. Tsofa, B., Molyneux, S., Gilson, L. & Goodman, C. How does decentralisation affect health sector planning and financial management? a case study of early effects of devolution in Kilifi County, Kenya Lucy Gilson. *Int. J. Equity Health* **16**, 1–12 (2017).
37. McCollum, R., Limato, R., Otiso, L., Theobald, S. & Taegtmeyer, M. Health system governance following devolution: Comparing experiences of decentralisation in Kenya and Indonesia. *BMJ Glob. Heal.* **3**, 1–11 (2018).
38. Goodman, A., O., M., K. & S., M. Health facility committees and facility management - exploring the nature and depth of their roles in Coast Province, Kenya. *BMC Health Serv. Res.* **11**, 229 (2011).
39. Falisse, J. B., Meessen, B., Ndayishimiye, J. & Bossuyt, M. Community participation and voice mechanisms under performance-based financing schemes in Burundi. *Trop. Med. Int. Heal.* **17**, 674–682 (2012).
40. Mwakatumbula, B. H. The Implementation of Direct Health Facility Financing (DHFF): Prospects and Challenges. (2021).
41. Frumence, G., Nyamhanga, T., Mwangu, M. & Hurtig, A. Participation in health planning in a decentralised health system: Experiences from facility governing committees in the Kongwa district of Tanzania. **9**, 1125–1138 (2014).
42. Iwami, M. & Petchey, R. A CLAS act? Community-based organizations, health service decentralization and primary care development in Peru. *J. Public Health Med.* **24**, 246–251 (2002).
43. Roman, T. E., Cleary, S. & McIntyre, D. Exploring the functioning of decision space: A review of the available health systems literature. *Int. J. Heal. Policy Manag.* **6**, 365–376 (2017).
44. Kesale, Anosisye; Mahonge, C. M. M. The Determinants of the Performance of Health Facility Governing Committees (HFGC) in Selected Primary Health Facilities in Tanzania. *Tanzania J. Community Dev. J. Community Dev. Prof.* **1**, (2021).

Figures

Figure 1

Conceptual Framework

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [Supplementaryfile.docx](#)