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Essential medicine stock-outs in rural primary health care – exploring the contribution of politics and resulting perceptions in Kasulu District, Tanzania

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Abstract

Stock-outs of essential medicines and medical items remains a persistent problem in Tanzania, despite the several policy initiatives and interventions since the 1990s. We conducted a qualitative case study, which involved 24 in-depth interviews and eight focus group discussions with the Community Health Fund stakeholders who were facility in-charges, grassroots leaders, and members of Health Facility Governance Committees from eight primary health facilities in Kasulu District Council. The analysis involved transcribing and coding textual data to identify the key themes that emerged. The study identified four main themes that explained how the politics contribute to persistent stock outs, especially: 1) stock-outs as capital in electoral politics; 2) misinformation and rent-seeking; 3) dyads among street-level bureaucrats; and 4) competition and struggle for power and control over resources. We also identified four themes reflecting the dominant perceptions associated with stock-outs in the study communities namely: 1) feeling marginalized; 2) mistrust and suspicion of authority; 3) frustration of health workers; and 4) informal drug sellers as 'the best'. These perceptions influence the way communities tend to define their role in health care financing and governance as well as the relationship between communities and health workers. While economic, administrative, and technical forces might influence stock outs, the politics within the management and governance of the Community Health Fund, which included rent-seeking, misinformation, and competition, significantly affected the legitimacy of the Community Health Fund. The resulting low enrollment and unwillingness to contribute makes medicines' financing from community sources unsustainable. Therefore, empowering communities to mobilize locally available resources and exercise autonomous control over financial resources and medicine is imperative for addressing persistent stock outs.

Keywords: Primary Health Care; Medicine Stock Outs; Community Health Fund; Politics; Tanzania

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1. Background

Availability and accessibility of essential medicines and medical items are essential for effective delivery of primary health services (Hwang et al., 2010). Primary health care can hardly serve as a means for achieving universal health coverage if primary health facilities do not have sufficient medicines for prevention and cure of common diseases (Charles and DeMaio, 1993; Eng and Young, 1992). It is worthless to have well-trained health professionals without medicines and medical supplies in health facilities (Evans and Harris, 2004; Barrett, et al., 2003). The availability of medicine enhances trust and good relationships between services users and health professionals, which is crucial for successful primary health care (Mishra, 2014). This is particularly true in rural communities, where majorities of the poor and vulnerable groups rely on public primary health facilities for all their health needs. There is evidence that medicine stock-outs detrimentally affect rural communities more than their urban counterparts ("Cameron A, Ewen M, Ross-Degnan D, Ball D, Laing R. Medicine prices, availability, and affordability in 36 developing and middle-income countries: a secondary analysis. Lancet 2009;373:240-249," ; Khuluza and Heide, 2017; Yang et al., 2010), as rural communities are also disproportionally burdened with poverty, poor infrastructure, shortage of well-trained health workers, and a more limited contribution of the private and voluntary sectors in health services delivery (Management Sciences for Health et al., 2007). For these reasons, it is not surprising that there are more deaths that result from lack of medicines in rural communities than urban communities in developing countries, Tanzania being one of them (Hogerzeil, 2006; Knaul et al., 2012).

Efforts to address medicine availability in Tanzania go back to the 1960s, the years of independence. However, the most remarkable policy interventions started in the 1990s following liberalization of the health sector and the call to diversify the sources of funds for financing medicines. After independence in 1961, the new government inherited a weak health sector characterized by urban-oriented services (Turshen, 1977, 1984). There were efforts to develop a cadre of trained health personnel and construct primary health facilities in rural areas between 1970 and 1980. However, given the economic hardships that Tanzania went through in the 1970s and early 1980s due to the oil crisis and the war with Uganda, medicine availability in the newly constructed health facilities was a problem. The other important reason for limited availability of medicines in rural communities was that the government outlawed health service delivery by private sector actors between the 1970s to early 1990s. Under the Private Hospitals (Regulation) Act No. 6 of 1977, private health service providers were banned until the enactment of the Private Hospital (Amendment) Act (Cap 26) in 1991 (Dutta, 2015; Wangwe et al., 1998).

One important landmark change in national health policy, which among other things sought to increase medicine availability and accessibility for the rural communities, was the establishment the Medical Stores Department (MSD) in 1993 under the Parliament Act No. 13 of 1993. MSD was established as an independent agency responsible for procurement and distribution of medicine and medical items in all public health facilities and other approved non-government facilities. The vision of MSD was providing quality medical services closer to people by making available at all times essential drugs and medical supplies of acceptable quality at cost-effective prices to all the people. MSD has kept apace to find better ways through which the

facilities in rural remote areas could get medicines timely, including continuous improvements in medicine ordering and supply systems.

There is a number of policies to boost investor interest in supporting essential medicine availability in rural communities. The national health policies of 1990, 2003, and 2007 encouraged investment in primary health service delivery and the establishment of drug shops in rural areas to complement the role of primary health facilities (URT, 2007a). These investments received heightened support under the Public-Private Partnership (PPP) policy of 2009, which encouraged private investors to contribute towards increased availability, accessibility, and affordability of essential medicines (URT, 1990, 2007b). However, private investment in the sale of medicine and general delivery of primary health services was successful in urban areas only. Investors who attempted to run drug shops in the rural settings failed since they could not meet the required operational standards and qualifications set by the government (URT, 2007b).

The establishment of two interrelated community-based insurance schemes in 2001 was also important in addressing persistent medicine shortages. These were the Community Health Fund (CHF) under the CHF Act No. 1 of 2001, a voluntary community-led insurance scheme that operates in all rural districts and its urban equivalent, the Tiba Kwa Kadi (TIKA). The CHF mobilizes contributions from the communities. Health Facility Governance Committees (HFGC) and Facilities Management Teams under the supervision of the district councils jointly manage it. The HFGCs include representatives from community groups, grassroots authorities, and primary health facilities. The guidelines require facilities to spend 67 percent of the CHF funds on medicines and only 33 percent on other facility-level expenses. Those who opt not to contribute an agreed annual contribution are charged 5000 shillings per visit at a primary health facility. In addition to the CHF contributions, facilities are entitled to a *tele-kwa-tele* matching grant from the government, which usually takes a form of direct transfers to MSD (Frumence et al., 2014) to cover part of the facilities' medicine orders.

Recently, the focus has changed from developing the policies toward addressing systemic, logistical, and technical barriers that contribute to the delays in the distribution and delivery of the medicines. First, MSD has adopted the use of the Integrated Logistics System (ILS), a pull system which required facilities to make requests for medicines based on their actual demand and budget estimates, which the district councils had to approve and forward to MSD (Sikika, 2011; Wales, Tobias et al., 2014). This change was aimed at avoiding supplying equal quantities of medicines for all health facilities [18], which resulted in overstocking some facilities and shortages in others. Second, the delivery system has changed so that MSD versus district councils directly deliver medicine to the health facilities to avoid delays. Thirdly, health facilities request medicines quarterly to allow them to develop justifiable estimates and ensure timely delivery. Fourthly, between 2014 and 2017 MSD has attempted to adopt new technologies for receiving, retrieving, and managing medicine orders from district councils, such as the electronic Logistics Management Information System (eLMIS) and Vaccine Information Management System (VIMS). These systems allow MSD to monitor medicine and medical items needs at facility and district levels (Mikkelsen-Lopez et al., 2014; Wales et al., 2014). Finally, attempts have been made to improve the management and governance of the funds to simplify the purchase procedures. All facilities and HFGCs have their own bank accounts; the district councils through the District Executive Directors' offices have to approve requests and withdrawals as a supervisory role. The District Medical Officers (DMO) who formally had control over medicines' purchase and distribution are currently responsible for

facilitating purchase and distribution logistics. Each HFGC has its own checkbook and bank signatories. These changes aimed at enhancing community oversight, reducing possibilities of financial leakages, and increasing trust among communities.

Despite the ongoing policy and practical interventions, stock-outs have been persistent in rural primary health facilities. Previous studies report acute shortages of medicines and persistent stock-outs in rural communities (Mtei et al., 2012; Stoermer et al., 2011). In 2011, nearly 92 percent of the facilities faced a problem of stock-outs (Sikika, 2011). In 2014, 29 percent of rural facilities had an average of six out of twelve weeks out of stock (Mikkelsen-Lopez et al., 2014). Medicine availability was most critical for those medicines purchased using community and government resources (40 percent) compared to those purchased using donor support (93 to 94 percent) (Khuluza and Heide, 2017). For instance, the recent study by Ewen and colleagues (Ewen et al., 2017) found that facilities had an average availability of 21 percent for imported essential medicine and 32 percent for locally produced medicine. Further, studies identified key reasons for persistent medicine stock-outs included limited government allocations (Frumence et al., 2014; Mikkelsen-Lopez et al., 2014; Sikika, 2011), limited facility planning and forecasting capabilities (Sikika, 2011), and complicated procedures that make funds the CHF funds hard to access (Kessy and Ramsey, 2014). Other reasons included the lack of accountability in the medicine supply chain, and reliance on donor funding (Wales et al., 2014), high prices of medicines, elastic financing by the government, and irrational use of medicines at the facility level (Ewen et al., 2017; Wiedenmayer, 2004).

In light of this background, we explored the contribution of the politics arising from the management of the CHF to the persistence of stock outs in rural primary health facilities and how the persistence of stock outs influence communities' perceptions regarding their role in health care financing and governance. The paper argues that the politics related to primary health care governance, particularly the governance of the CHF, significantly contribute to the persistence of medicine stock-outs. We look at the implementation of the CHF as a process that necessarily involves politics. We define politics based on Harold Lasswell, as who gets what? When? And how –a competitive struggle to get something or allocate resources and values (Lasswell, 1950). This struggle matters in the implementation of all public affairs including health care rather than just acquisition and exercise of state power (Birner and Wittmer, 2000; Borrell et al., 2007). Therefore, we posited that in the implementation of community-level programs such as the CHF, political actors would focus more on what might maximize chances for attaining their intended goals rather than the outcomes for communities (Vicente Navarro et al., 2006). Based on our findings, we argue that the management of the CHF and primary health care is characterized by instrumental politics –especially, politicians appeal to social capital mechanisms such as mobilizing trust and raising sympathy among communities for attaining personal private interests (Birner and Wittmer, 2000). We conclude that politics and political interactions at grassroots and national level strongly account for the persistence of essential medicines' stock-outs in the primary health facilities. Given these politics, there is a challenge of making primary health facilities and the management of the CHF truly community-owned, which is crucial for mobilizing sufficient resources from communities and reducing communities' dependence on the government for their medicines' needs.

2. Methods

2.1. Research design

A qualitative case study design was used to generate data. We selected eight primary health facilities in eight villages from Kasulu District Council, a rural district in the northwest Tanzania. This design was appropriate for exploring experiences and perceptions attached to stock outs and getting in-depth accounts (Stake and Savolainen, 1995) of the key stakeholders on how politics arising from the management and governance of the CHF contribute to persistent stock outs. The case study design allowed us to develop a detailed description of the ways in which processes and contexts (Yin, 2012, 2013) related to the management of the CHF contributed to persistent stock outs.

2.2. Cases and case selection

Kasulu District Council was selected purposefully as a district council with the largest (98.2 percent) population living in rural settings. The health and transport infrastructure, economic activities, and the general pattern of social and political interactions in the district are largely influenced by the rural context, which was the interest of the study. In our study, a case was a health community, which was defined as a geographically located population that share concerns since they share a primary health service unit (Falisse et al., 2012; Goetz and Jenkins, 2002), which could be a dispensary or health center. The sense of sharing enhances social ties, collective identity, and the sense of belonging (Gusfield, 1975; McMillan and Chavis, 1986). Depending on the structure of the Tanzanian health system, a village or two villages sharing a dispensary or health center as their lowest primary health service unit constituted a case for analysis.

The selection of health facilities and villages involved two purposive selection procedures. First, we identified 38 villages that had operating public primary health facilities out of 66 villages in the district. Second, we selected eight facilities including six out of 32 dispensaries and one health center out of six. A village was selected if it had a primary health facility, which is publicly owned and operating under grassroots authorities. We made sure that at least one of the selected health facilities was a health center and that there was at least a distance of six kilometers between one selected health facility and another to increase our ability to make a distinction between the cases. The study targeted participants who had experiences related to primary health care and CHF management and governance, especially those who participated health facility governance committees and the day-to-day management of primary health care at community and health facility level. These were: village chairpersons, Village Executives Officers (VOEs), health facility in-charges and members of the HFGCs.

2.3. Data collection methods

Qualitative case studies use different methods of data collection and different techniques to validate data and ensure the quality of findings (Stake and Savolainen, 1995; Yin, 2013). To achieve this, we used triangulation of data collection methods –related questions were asked to different respondent groups to ensure that the

study findings were credible and verifiable (Jick, 1979). Two main methods were used to to collect data, namely in-depth interviews and focus group discussions. Official documents and participant observation at the health facilities, village government officers, and district council were used to verify data from other sources. The two main methods are explained in detail.

2.3.1. . Interview organization and procedures

Interviews were used to collect data from village chairpersons, VEOs, and health facility in-charges with a purpose of exploring their perspectives and experiences on how the activities related the management and governance of the CHF and their connection with stock-outs. Given their role in managing and governing the CHF, they had good experience and rich information on both the implementation of the CHF and efforts that had been in place to address stock outs. Therefore, in-depth interviews were appropriate for getting their insights and learning their experiences (Boyce and Neale, 2006) on how communities perceive both the CHF and stock outs as well their influence on the perceived role of communities in primary health care financing and governance.

We conducted all the interviews at respondents' offices after seeking appointment and explaining the study purpose at least four days before the interview day to give the respondents ample time to identify the time, which would be convenient. The interviews lasted between 45 and 60 minutes. We used a semi-structured interview guide with 11 standard open-ended questions, which generally sought to elicit information on: (1) how the CHF facilitated (or constrained) access to medicine, (2) what health workers, grassroots authorities, HFGCs, and the district council were doing to address the problem of stockouts, and (3) what the respondent thought were the causes of persistent stock outs. Other questions related to: (4) how community members responded to stock outs, and (5) how stock outs affected different groups in the communities and what could be done to address the persistence of stock outs.

The interview questions were constructed in English but were translated and asked in Kiswahili language during the interviews. The reason was that many of the interviewees could clearly hear, understand, and express themselves in Kiswahili rather than English. During the translation of the interview guide, we consulted two translators who were fluent in both English and Kiswahili to make sure that translation would not distort the intended meaning. Nevertheless, in case the interviewer noted from the responses that the respondent could have understood the questions differently, such questions were rephrased to ensure the respondents got the intended meaning. Similarly, probing questions were used to make sure the respondents remain focused and provide useful information. Since the respondents had good experience regarding the management of the CHF and how communities reacted when health facilities had no medicine, the open-ended nature of the interview questions allowed the interviewer to ask more questions and get clarification. All the interviews were recorded using the electronic audio recording device after getting verbal consent from interviewees. Verification whether the interviews were correctly recorded and could be heard was done before leaving the field. The audio files were saved on a secured computer and backed up on an external hard disk before transcription into textual data for further coding and analysis.

2.3.2. Description of the focus group discussions

One focus group discussion was organized and conducted in each of the health facilities to share experiences with members of HFGCs on how the practices related to governance of the CHF contribute to stock-outs. Focus group discussions provided an opportunity for learning the shared emotions and attitudes of participants towards the problem of medicine stock-outs and verification of contradicting information from individual interviews (Denzin and Lincoln, 2008; Morgan, 1996). The arrangement was made with facility in-charges to invite eight to 12 members of the committees to participate in the discussions. The Village Executive Officers assisted the researcher to identify the venue for the group discussions. In four of the groups, 10 participants attended while two had eight, and the remaining two had seven and 13 respectively. Participants in each of the groups provided verbal consent after explaining the aim, duration, modality, and benefit of participating in the discussions.

The focus group discussions were guided by a written semi-structured interview guide, which had six main questions. The questions sought to get participants share their experiences on the performance of the CHF including how community members perceived it and its strength and weakness in terms of ensuring timely availability of medicine. The questions also inquired on the role of HFGCs and the challenges that HFGCs faced in their efforts to ensure availability of medicine and services in general. The other questions required participants to share experiences on how community members whom they represented as well as the health workers were being affected by medicine stock-outs. The first author (RSD) facilitated all discussions with the assistance of two trained research assistants. At the end of each day, the audios were transferred to the computer and stored for further listening and transcription.

2.4. Data analysis

The process of analyzing data started with transcription of the interview and focus group discussion audios and translating them back into English. The interview and focus group discussion audios were transcribed word-by-word. Two different translators were used –the first translated the transcripts from Kiswahili into English, then the second translated them back into Kiswahili. The two translators came together to compare the original and final Kiswahili versions and finally agree whether the English version reflected the content of the original Kiswahili transcript. Inductive thematic analysis was used to analyze data and identification of themes. Thematic analysis involves identifying, examining, and classifying pattern of information that constitutes the key conceptual and theoretical messages in the data (Anderson, 2007; Smith, 1992). Accordingly, identification of themes involved examining the data and determining recurrent unifying concepts and statements about the subject of the study (Bradley et al., 2007). The analysis involved identification of themes emerging from the textual transcripts (Thomas, 2006) rather than prior identified theoretical concepts. Our focus in the analysis was on the messages arising from self-repeating expressions, which could be uncommon in the day-to-day communication, but reflecting respondents' perceptions, feelings, and experiences (Pope et al., 2000) regarding the problem of stock outs as well as the social, economic, and political context of the communities.

Themes' identification followed systematic thematic analysis procedures as suggested by Bernard and Ryan (Bernard and Ryan, 1998; Bernard and Ryan, 2009; Ryan and Bernard, 2003). Transcripts were closely examined to discover the key messages before starting coding. We identified possible themes and coded the transcripts against the selected themes using Nvivo Version 10 software. We started with a broad range of themes and subthemes, which we classified and combined to get eight coherent themes we considered relevant and important. We built a relational codebook containing the final codes and finally built descriptive accounts that linked the codes with our core theoretical assumptions on how the politics of CHF governance contributed to the nature of stock-outs in the primary health facilities. The forthcoming sections present the results in light of the identified themes.

2.5. . Ethics and consent

A study proposal, which included ethical procedures and a verbal consent template was reviewed and approved by the Higher Degrees Committee, which on behalf of the Tanzania Commission for Science and Technology issues ethical approvals for academic research projects that do not involve human subjects at the University of Dar es Salaam. The template included the information that sought to ensure that the purpose of the study, interviewing procedures including audio recording, how the information supplied by respondents could be kept and used, and the steps that would be taken to ensure the privacy of the respondents including anonymity were clearly explained to interview and focus groups participants. The template also included explanations on the benefit that the respondents and their communities would expect as a result of the study and that their participation was voluntary and the respondents were free to decide not to participate or answer any of the questions. Further, it included the information on the university authorities, which could be contacted if the respondents had more questions regarding the study. After the explanations, the researcher asked if the respondents had any questions and the questions that they raised were answered. Finally, the respondents were asked if they were ready to participate in the interviews and focus group discussions where their oral consent was recorded as part of the interview records to avoid possibilities of compromising confidentiality.

3. Results

The study was conducted at eight primary health facilities in eight selected villages of Kasulu District Council. Seven of the facilities were dispensaries, five of which served one village each and two of them served two villages each. The remaining one was a health center, which apart from serving the village in which it was located served as a referral facility for the neighboring villages. Table 1 provides the breakdown of health facilities and respondents who participated in the study by villages and HFGCs.

Table 1. Breakdown of health facilities and respondents by villages and HFGCs

	Facility type	Catchment villages	Grassroots authorities' interviewees		Health facility in-charges (IDIs)	HFGC members (FGDs)
			Village chairpersons	VEOs		
1	Dispensary	1	1	0	1	9
2	Dispensary	1	1	1	1	10
3	Dispensary	1	1	1	1	8
4	Dispensary	2	1	1	1	13
5	Dispensary	1	1	1	1	7
6	Health centre	1(+referral use)	1	1	1	9
7	Dispensary	1	1	1	1	10
8	Dispensary	2	1	1	1	8
Total		**11 (+)**	**8**	**7**	**8**	**74**

3.1. Contribution of the CHF politics to the of persistence of stock outs

The study identified four main themes regarding the contribution of the CHF politics to the persistence of stock outs. These were: 1) stock-outs as capital in electoral politics, 2) misinformation and rent-seeking, 3) dyads among street-level bureaucracies and 4) competition and struggle for power and control over resources.

3.1.1. Stock-outs as 'capital' in electoral politics

The study participants revealed that both grassroots' and national electoral politics raised issues related to the shortage of medicine in primary health facilities. Many interviewees had experience that candidates for both grassroots and national positions used stock-outs as a strategic discourse for winning trust and sympathy of voters. From interviews with facility in-charges and VEOs, we noted that issues related to the efficiency, financial integrity, and cost-effectiveness in the management of the CHF and their connection with stock-outs in primary health facilities dominated the 2014 civic elections and the 2015 general elections' politics.

Data from interviews revealed that oppositional parties and candidates used different tactics to win the support of potential voters, which affected contributions to the CHF. Many respondents reported that they used campaign rallies to make potential voters believe that stock-outs were associated with mismanagement of the CHF funds and that there was theft of money and medicine at facility and district levels. Table 2 summarizes the main explanations for stock-outs as the respondents experienced them during the 2014 civic elections and 2015 general elections.

Table 2: Allegations relating stock outs and financial mismanagement during the 2014 and 2015 elections

Level and year	**Direction of allegations**	**Allegations as explained by political parties and candidates**
Presidential and parliamentary elections 2015	-The ruling party CCM and its government	-Grand corruption, mismanagement of the economy, financial leakages
	- Health Workers	-Health workers were stealing medicine and medical items and selling them in their private shops

	-The district council	-Misuse of finance allocated for the primary health facilities, misallocation of funds
Local government councilors' elections of 2015	The district council	-Prevalent corruption in the district council -Mismanagement of the CHF fund and theft by 'unknown officials'
	-Health workers	-Misusing the funds allocated for primary health facilities -Stealing medicine and medical items
Civic election of 2014	-The district council	-Prevalent corruption in the district council and theft of CHF funds
	-Health workers	-Theft of money and medicine at primary health facilities

While these allegations lacked proof and one may take them as part of a political process, interviews and focus group discussions revealed that many of the community members took them as 'the truth'. As many of the respondents explained, electoral competition increased the allegations to the extent that many of the community members stopped paying CHF contributions, believing that health workers were stealing money and medicine and responsible for the stock-outs. Some political parties and their candidates made promises that if elected they would ensure that all community members receive free services, including free access to medicine. However, after the elections, those who won could not fulfill those promises. Respondents felt that very few community members noticed that such promises were 'political' and thus they thought they had a right to get medicine without paying. One respondent who was a facility in-charge explained:

> *"They told them they would provide free services and many people believed in that...people are no longer paying CHF, while some come to the dispensary asking free medicines because their leaders promised them" (In-depth interview, Facility In-charge)*

Regarding the same point, another respondent said the following:

> *"People do not understand that only the exempted have the right to access health services free of charge. They come to me saying the government has removed user fees since it brings free medicine, but when they go to the dispensary they are required to pay" (In-depth interview, VEO)*

Another common theme, which many respondents linked with the 2015 presidential and parliamentary election campaigns, was the allegation that most of the health workers, especially facility in-charges owned pharmacies and drug shops, which they used to sell the medicines they steal from primary health facilities. According to the respondents, these allegations came from one of the presidential candidates during the 2015 general elections. These allegations were popular even in the local government councilors' elections. From interviews with facility in-charges, apart from affecting the readiness of community members to pay CHF contributions, many of the community-level CHF mobilizers could not move around communities and mobilize contributions due to these allegations.

From interviews and focus group discussions, the study generally found that electoral politics involved rent-seeking behavior. Politicians were engaged in misinformation, manipulation of information, and making false allegations, and promises, which were not easy to fulfill in order to win trust and support from communities. While the goal was to win elections, these actions received varying interpretations among

community members. While some community members reacted by refusing to pay CHF contributions, other came to believe that the government had a duty to provide free medicine to all community members. Generally, such politics contributed to community perceptions of mistrust, theft, and lack of financial integrity in the management of the CHF, which in turn affected mobilization of funds for financing medicine. Study participants believed this was associated with the apathetic participation of communities in monitoring how their money was being used. Many of the respondents find the failure to mobilize communities to contribute and engage in financial oversight activities is one of the most important reasons for the persistence of stock outs.

3.1.2. Dyads among street-level bureaucrats

Our study found that government officials who had supervisory relationships formed dyads to protect each other from direct public confrontation instead of supervising each other or checking the powers of one another for effective delivery of primary health services. The employees who were employed by the district council to work with village authorities in the implementation of development programs such as teachers and health workers work under the supervision of the VEO who is also an appointee of the District Executive Director. Therefore, the expected formal relationship between the VEO and facility in-charges is that facility in-charges are supposed to be accountable to communities through village councils to which VEOs serve as secretaries. On the other hand, elected village chairpersons chair the village councils. This relationship implies that people have control over the facility in-charge, first through the village council and secondly through the village assembly, a supreme village authority that includes all community members who are aged 18 and above. However, the findings revealed that the dyadic relationship creates the need that the VEOs should always protect their fellow 'civil servants'. This relationship became a tool for shadowing health facility in-charges against being held accountable by communities and their representatives despite the existence of concerns that facility in-charges were responsible for ensuring availability of medicine in their particular facilities. The following quotation illustrates this point of view:

> *"I sometimes receive complaints from CHF members that the facility in-charge took their money and told them they would get medicine, but no medicine. You look at a person and fail what to do. These are our fellow employees, and you know…I don't want to make them feel bad" (In-depth interview, VEO)*

Another respondent presented a related view during the interview:

> "*You try as much as you can to respect a person, but sometimes he lets you down. I always tell him to do all he can to make sure that people get services and if there is no medicine, they know the reason. The way I tell him, he needs to understand that we have come all the way here since the government has employed us to serve these people. Why should we make them unhappy?" (In-depth interview, VEO)*

Interviews with grassroots leaders and officials revealed that in some cases, limited control of communities and their elected leaders over facility in-charges and health workers contributed to the persistence of stock-

outs and the generally poor performance of primary health facilities. Respondents identified different mechanisms through which the VEOs and facility in-charges used the dyadic relationship as a means for weakening community pressures regarding the stock-outs. The first mechanism was that VEOs usually alerted the facility in-charges not to attend village assembly meetings when communities had concerns thought to be *"hard to defend".* In three of the study communities, we found complaints that the facility in-charges had refused to appear before the village assembly meetings to explain to the community members why they did not get medicine for more than six months despite the fact that they were paying CHF contributions. One village chairperson illustrated this as follows:

> *"Sometimes the district council has to act if the facility in-charge tells them that the situation is worse. However, here he does not take care since he knows that nobody can tell him anything. People have complained and we called him, but he could not come to the meeting. I told the VEO to tell him, I don't know what happened" (In-depth interview, Village Chairperson)*

Another respondent from a different village described another case of community accountability gone wrong:

> *"People were in a big panic that the health workers refused to attend the child while medicine was there. I knew that the facility in-charge was in the town that day. I am sure the nurse could not do anything to serve the child. So, all the people were waiting for him at the meeting…I told him not to come to the meeting because they could not understand him" (In-depth interview, VEO)*

Another commonly used mechanism was that the VEOs and facility in-charges had more access to the information from the district council and could make sure that other grassroots authorities, including the village chairpersons, did not access such information. For example, the facility in-charge from one facility claimed to have received information that the CHF funds, which were retained in a collective CHF account at the district council, had been stolen. Due to the worry that sharing the information with other CHF stakeholders including the village chairperson and HFGC members could lead to protests, the facility in-charge and VEO decided to conceal the issue.

From interviews and observations, we noted that the intention of developing and maintaining dyadic relationship was positive, especially keeping the health workers as street-level bureaucracies protected from confrontations by local communities, which was frustrating. However, we found that in most of the cases these dyadic relations resulted in unintended outcomes, including the tendency of facility in-charges to ignore community concerns and avoid accountability to their executives at the district council. Many of the participants felt that limited assurance among community members that they have indirect or direct power and control over health workers affected both paying CHF contributions and taking appropriate steps to hold relevant authorities accountable for medicines availability.

3.1.3. Competition for power and resources' control

From both interviews and focus group discussions, it was clear that the management of the CHF involves competition and the struggle to exercise power and autonomy among different actors at grassroots, district, and national levels. Most of these competitions revolve around who should have the final say on the allocation of the finance, the power to make important decisions, and accountability between different positions in the management of the CHF. Respondents explained different scenarios that manifest competition for exercising power and the allocation of resources. However, the most common concerned the supervisory relationship between the facility in-charges on one hand and grassroots authorities on the other, especially both the village chairpersons and VEOs. From many of the interviews, we noted that most of the facility in-charges were not ready to recognize that they were supposed to work under supervision from village authorities. Contrary to the requirement, many of the facility in-charges were not formally submitting written reports to VEOs who are their immediate supervisors in the context of primary health care. Quotations from interviews with VEOs and village chairpersons illustrate this view:

> *"Sometimes these people think we are not supposed to ask them anything even if our people come here complaining. You ask them why the people are complaining about medicine, but they tell you that they should go and complain to the district council" (In-depth interview, Village Chairperson).*

Another interviewee had a closely related comment as follows:

> *"I understand that I am responsible for ensuring that all the government institutions in this village deliver quality services. Be the schools, dispensary, or water points; all are supposed to be under my authority and these health workers must bring reports to my office, but I was told he says that he doesn't know any boss other than the DMO and the DED at the district council" (In-depth interview, VEO)*

In contrast, we found in two of the villages that the VEO and facility in-charge shared reports before they were sent to the district council. Two main reasons were identified regarding why the facility in-charges were refusing to be answerable to the community-level authorities including the VEOs and village chairpersons. Some of the respondents pointed out that majority of the VEOs and village chairpersons had very low levels of education compared to facility in-charges, which made them always fail to exercise their authority. Other respondents said that grassroots authorities had no right to exercise control over facility in-charges and health workers since they neither recruited them nor paid them salaries. Instead, they thought health workers were directly accountable to the DED who recruits them and the DMO was their technical supervisor at the district level.

Similar competition existed between the district council and HFGCs regarding the allocation of the funds. While it was a formal jurisdiction of HFGCs to prioritize and make the final financial plans and decisions, which the district council would only endorse for action, many of the respondents were concerned that the district council was intruding into their jurisdiction. All the participants explained a concern that the district council was imposing stringent bureaucratic procedures, which for unknown reasons resulted in the failure to get

money from the facility CHF accounts and buy medicines timely. Given these interferences, many of the respondents felt that decentralization of decision-making to the HFGCs was still a political propaganda since it involved deconcentration of the day-to-day delivery of primary health care services to the facility and community-level organs while the district council continues to retain fiscal and decision-making powers and autonomy. Generally, many of the respondents had a feeling that communities and HFGCs, which represent them, are not sufficiently empowered to identify their medicines' needs, prioritize financing, and procures appropriate quantities of medicine based on the needs of their communities. Subsequently, the competition for power and autonomy and political domination by the district council undermine the responsiveness of health facilities and HFGCS to community members, which includes using all the available means to make medicines available. Similarly, it affected the capacity of HFGCs to keep relevant authorities in check for ensuring timely availability of medicine.

3.2. Stock-outs related perceptions in primary health care

Persistent stock-outs were associated with changing perceptions about community role in the financing and governance of health care and significantly affected the relationship between communities and health workers. Connected with persistent stock outs, the study identified four themes that reflected the popular perceptions about the CHF, stock outs, and primary health care in general. These themes were: 1) the feeling of marginalization; 2) mistrust and suspicion of authority; 3) frustration of health workers; and 4) informal drug sellers as 'the best'.

3.2.1. Feeling marginalized

There was a widespread sense among participants that they were members of marginalized communities. The vast majority of the respondents complained that the government and its authorities had little concern their health and well-being because they were rural communities. Since the district was divided into two councils – the district and town council, the respondents felt that both the district and national level authorities were directing more of their health care improvement efforts and resources to the town council. Related to that, some of the respondents had a feeling that the government had no plans for ensuring availability of medicine for those who were living in the rural areas since they had suffered for many years but nobody appeared to care. Some respondents had the following remarks:

> *"I am not sure if these people think there are their fellow human beings who live in these remote villages. We don't have transport, the roads are bad, and they do not concerned about our health" (FGD, HFGC member).*

> *"We sit down and think that maybe this is not Tanzania…maybe this is Burundi. You sit down and wait for medicine for months. I don't think if the same thing is happening in the urban dispensaries" (FGD, HFGC member)*

Data from focus group discussions revealed grassroots leaders and officials at village and ward levels, as well as health workers, shared the feeling that rural communities were the most deprived despite their contribution to the survival of the rural communities. Many of the respondents had a feeling that the government was favoring those who live in cities and town such as Dar es Salaam and Kasulu town. Facility in-charges described how health workers perceived deployment to work in rural communities as a punishment due to low education. Some participants felt that the top government political leaders do not often remember the rural communities in terms of ensuring availability of health services. The participants had a general feeling that staying in rural areas place them in a place of being *'forgotten and excluded'* as they thought that urban dispensaries and health centers could not stay for long without medicine and medical supplies.

The study identified two reasons that contributed to the perceptions of marginalization. The first reason relates to experiences of communities regarding how they interact with the government leaders and officials from the district and national level institutions. Respondents explained that when they see a government leader in their villages they got the impression that the government had some strategic objectives, which could not succeed without using people from rural communities. The second reason was the remoteness and inaccessibility of the communities themselves. Some of the communities, which were identified as hard to reach rarely interacted with government officials from the district or national levels who could address their medicine availability problems. Many participants explained that their villages saw political leaders during electoral campaigns only and the promises made during the elections were not always reliable. For these reasons, many respondents felt that the government was less concerned with their overarching problems, including stock outs. One of the participants during the focus group discussion explained that the top government leaders only remembered the rural communities if they needed certain support, especially during elections or legitimation of a policy that the government needed to be accepted by the rural communities. The respondent who was a member of HFGC had the following to say:

> *"These people can only remember us if they want food because we produce food. If there is hunger that affects the towns and cities, they will come to villages and tell us to produce more food for them. They can also remember us if they want votes, but they rarely remember that they have medicine, which we need" (FGD, HFGC member)*

The study generally found that perceptions of marginalization had a noteworthy effect on the efforts to ensure availability of medicine in primary health care in two main ways. First, these perceptions affect the potential of increasing the financial contribution of communities through the CHF, which respondents thought was crucial for offsetting the gap that arises when the government fails to fulfill its responsibility. Second, perceptions of marginalization undermine community ownership, which is one of the central principles that guide the implementation of the CHF. In that way, it also affects the voluntary participation of communities in the CHF, which limits interventions that aim at strengthening community oversight.

3.2.2. Mistrust and suspicion of authority

The feelings of mistrust and suspicion of those people whom communities considered to have authority were prevalent across all the study communities. Our findings revealed that community members had limited trust

in health workers and grassroots leaders and were suspicious of all individuals whom they thought had close communication with authorities. From interviews and focus group discussions, we found that 'having authority' is broadly conceived to include all attributes of socioeconomic status and the influence that individuals have in the communities. Findings revealed that many of the community members think authority has to do with education, occupation, income, political or spiritual leadership, or holding a public office. In that respect, community members have limited trust in health workers and other officials at grassroots levels such as the VEOs and teachers, elected leaders such as the village and *kitongoji* (a local name for a hamlet) chairpersons, and the representatives in HFGCs.

Similarly, we noted limited trust and suspicion of people who were well-educated, religious leaders, or economically successful individuals. Respondents explained that community members tended to avoid interactions with these people whom they had labeled *'wakubwa'* (meaning big people) since they thought their agenda was not different from that of the health workers and grassroots officials. Subsequently, complaints and allegations related to medicines stock-outs, which in substance were about health workers were not openly communicated even in the absence of health workers. From interviews, we found that the formal procedures require communities to communicate their complaints and other concerns through either the representatives in health committees or the grassroots authorities. However, in many cases, community members avoided complaining to both the members of health committees and grassroots leaders because they thought they could disclose the complainants to health workers. The quotation from one of the interviews demonstrates this observation:

> "*A person comes to you and tells you the mganga has done so and so and you decide to keep quiet. You fear, if I talk to someone, the words will reach the mganga. You cannot trust them all. You think; it's better to tell the teacher, VEO, or any other person, but they will go and tell him" (FGD, HFGC members).*

The findings further revealed that mistrust and suspicion of authority had some connection with widespread perceptions that health workers, government officials, and grassroots officials were colluding to benefit themselves either by stealing the money or medicine. Respondents from all the study villages explained that communities thought the lack of medicine was due to the existence of many '*walanvya'* (translated as thieves) who were stealing CHF money and medicine at both community and district levels. Explaining this view, one grassroots leader said:

> *"The problem of medicine here is severe because the CHF has been changed into 'shamba la bibi' (translated as grandmother's farm –a Swahili idiom, which connotes something that anybody can sabotage without any counteraction). They are all 'walanvya', and they eat together. Each thief in there has a friend and each friend is a thief. Very few can stand and say they are not there for eating" (In-depth interview with the village chairperson).*

Nevertheless, the other respondents through interviews and FGDs had a view that the widespread allegations of theft were just politics and there was no evidence to justify them. They felt that many community members relied on gossip and never worked on issues to know the truth. The quotation from one of the FGD respondent may best illustrate this view:

> *"That's how our people are; they think everybody is a thief, especially when they see you with something valuable. They said that our VEO stole money and bought a motorcycle. The auditors proved it was not true. That is how they think, they call us, all of us are thieves, the mganga, the village chairperson, and even our families" (FGD, HFGC member)*

Data from different sources revealed that the level of trust determined the extent to which community members and their representatives could approach different officials, authorities, and institutions and explain their concerns including concerns about stock outs. Many of the respondents felt that community members could easily approach the *kitongoji* chairperson and explain their complaints rather than the VEO, village chairpersons, and the members of HFGCs who were very close with facility in-charges. Despite the fact that *kitongoji* chairpersons had a relatively limited influence on the CHF and medicine procurement decisions, community members preferred them than HFGC members. Our findings revealed that the problem of medicine stock out entails responsibility of different actors in the district councils, grassroots authorities, HFGCs, and health workers, whose roles are not clear to the communities. This places community members in dilemma regarding where they should complain and whom should they trust.

3.2.3. Frustration of health workers

Interviews with health workers revealed that stock-outs made their working environments unfriendly and frustrating. Many of them felt that despite their education and "*rare skill",* they often felt depressed uncomfortable with their work. The respondents explained that they were not happy to find themselves failing to fulfill their responsibility due to acute shortages of medicines. They thought no one could recognize their work and respect their profession in the absence of medicines because the respect they receive from communities depends on treating people, which becomes difficult without medicines in health facilities. One of the respondents had the following to say regarding the feeling of frustration:

> "*You cannot become a good doctor if you do not have medicine. Even if you received the best training, people will see you as a fool if you cannot treat them. What do you do without medicine? …You are nothing different from a peasant in this village" (In-depth interview, Facility In-charge).*

Another respondent explained a similar concern:

> *"We receive respect from community members because we have something that they do not have. You only prove that you have such a thing if you can treat a person. When someone is sick, you diagnose him and give him medicine. That is when they see you as a doctor" (In-depth interview, Facility In-charge).*

Further, interviews with the facility in-charges revealed that the frustrations, which resulted from medicines' shortages and stock-outs affected the relationship between health workers and communities and other community-level health care stakeholders including grassroots authorities. Consequently, the lack of cooperation and positive relationship with communities made health workers feel that they were in the wrong places. As one interviewee said:

> *"When I have medicine, I am always at peace. I can decide to move, go to the village government office for a small talk, or just say hi to the VEO and chairperson…I walk and talk with confidence. I can even visit the villagers' homes and have a glass of water" (In-depth interview, Facility In-charge).*

In the same line of argument, another respondent had the following to say:

> *"Let me tell you one thing. I only enjoy my work when we have medicine. When there is no medicine… When I see people coming and I do not have medicine I feel that the earth should open up so that I disappear" (In-depth interview, Facility in-charge).*

The findings further revealed that frustrations affected morale, job satisfaction, and commitment among health workers. Many of the respondents felt community appreciation and recognition, which they lacked due to stock-outs could best motivate them compared to monetary incentives. Others felt they deserved blame from the communities since they were receiving their entitlements as public servants despite the fact that they could not effectively utilize their full capacities due to shortages of medicines. One respondent said the following:

> *"Sometimes you want to work because you are being paid, you live in a good house, you live a life that is better than these villagers, but you can't help them anything. Sometimes I wake up feeling eager to work, but when people come and I do not have medicine or equipment for testing malaria, a person comes and I feel confused. I feel like they are wasting my time because I cannot do anything for them" (In-depth interview, Facility In-charge).*

3.2.4. Informal drug sellers as 'the best'

The findings uncovered the existence of many informal drug sellers who sold medicines, even prescription medications. Respondents explained that a good number of these drug sellers were individuals who bought and sold medicines in their homes and had not received any relevant training. They felt that informal drug sellers were perceived to be more trusted and legitimate than primary health facilities. Connected with this, patients bypassed primary health facilities and bought medicines from informal drug sellers even when the facilities had sufficient stocks of the required medicines. Other respondents felt that the increasing use of medicine from informal drug sellers was a direct result of the limited reliability of the government dispensaries and health centers. They said that community members relied on informal drug sellers because of the lack of accredited and registered drug shops in the villages, which could serve as an alternative for those who did not

want to get services from government dispensaries and health centers. There was only one drug shop that had a formal accreditation in all the villages that the researchers visited. However, an interview with the in-charge of the nearest dispensary revealed that the government had threatened to close that drug shop because it did not meet some of the important qualifications. He had the following to say:

> *"The shop is working; it serves many people, especially when we do not have medicine at the dispensary. But we are afraid that when they come for inspection they will close it because he does not have facilities for storing the medicines" (In-depth interview, Facility In-charge)*

We found that hat the drug shop owner was a retired health worker and understood issues related to medicine, but she could not get full accreditation because of poor medicine storage environments. The failure to get accreditation made most the drug sellers operate their business secretly; many of them sold medicines either in their homes or in the retail *kiosk*, which were selling other items.

From interviews and focus group discussions, the study identified three main reasons to why community members opted to use informal drug shops even when the dispensaries and health centers had sufficient stocks of medicine. The first reason, as the health workers pointed out was the reluctance of responsible authorities at grassroots and district levels to ban the informal sellers without a reliable alternative for ensuring medicines availability. The second reason was that, in many of the villages, those who were engaged in the sale of medicines were "famous people" including the wealthier and grassroots leaders. The third, but most striking reason was that community members preferred informal sellers due to the flexibility in terms of time of sale, payment terms, quantity, and listening what the buyers needed. One respondent provided a good illustration as follows:

> *"People like them because you can go in the night and get medicine. If you do not have money, she will give you medicine and you can pay later. If you do not have enough money when she comes to fetch it you can give her whatever you have; be it beans or groundnuts(FGD, HFGC member).*

Another respondent said:

> *"When you go with only 200 shillings and you want paracetamol, she will give you. If you have only 100 shillings, you simply go and buy two paracetamol tablets and you leave. Nobody is going to force you to buy a full dose or to force you to buy SP if you do not want" (FGD, HFGC member).*

Although they knew that informal drug sellers were 'illegal', respondents emphasized that they were preferred over health workers because they had good customer care and they communicated positively to their clients. A respondent provided the following remark during the focus group discussion:

> *"When you visit these people [informal drug sellers] they are not like our nurse and mganga (physician). They explain to you politely and you understand them. You can even go back and ask them they will tell you again. When the mganga writes and you don't understand you cannot go back and ask" (FGD, HFGC member).*

Overall, many of the respondents including grassroots officials and facility in-charges had a strong feeling that the importance and increasing trust in informal drug sellers was a result of persistent essential medicine stock-outs. Therefore, given the fact that stock-outs were becoming a common and continual problem, informal drug sellers needed to be empowered so that they attain the required qualifications since they were serving communities whenever public health facilities experience shortages and stock-outs of essential medicines.

4. Discussion

We used a cross-sectional qualitative case study to explore the contribution of the politics that emerge from the management of the Community Health Fund to the persistence of stock out of essential medicine and medical items in rural primary health facilities and perceptions resulting from such persistent stock-outs in Kasulu District Council. From interviews with facility in-charges and grassroots officials and leaders as well as focus group discussions with members of health facility governance committees, we identified four themes, which show how politics related to the CHF contributed to persistent stock outs. We also identified and analyzed four themes showing the dominant perceptions associated with stock-outs regarding the role of communities in primary health care financing as well as the relationship with health workers. Four themes that emerged regarding how the politics related to the CHF contributed to the persistence of stock-outs were: stock-outs as capital in electoral politics, misinformation and rent-seeking, dyads among street-level bureaucracies, and competition and struggle for power and control over resources. On the other hand, the themes that explained stock outs related perceptions regarding the role of communities in financing and governing primary health care were the feeling of marginalization, mistrust, and suspicion of authority, frustration of health workers, and informal drug sellers as 'the best'.

We found that the processes related to managing and governing the implementation of the CHF activities involved politics where different actors at grassroots, district, and national level used stock-outs as an opportunity for cultivating political capital, out-competing their political opponent, and maintaining status quo and political control. To achieve this, electoral competition necessarily took advantage of stock-outs of medicines and poor services delivery in primary health facilities as part of the overarching concerns of community members. As a way of making these concerns a dominant discourse in the elections, both candidates and political parties were largely engaged in the politics of misinformation of the potential voters and attacking health workers and other stakeholders who were responsible for health services delivery and managing financial resources at grassroots, district, and national levels. It was clear from the findings that these politics affected the readiness of community members to pay CHF contributions and effectively engage in important medicine and health services delivery oversight activities. Electoral politics involved allegations, which associated stock outs with theft of money and medicine at different levels of services delivery. With such allegations, the findings suggested that the lack of willingness to pay CHF contributions, which further undermined mobilization of resources from communities, was apparently a protest resulting from widespread negative perceptions and attitudes towards the CHF and its management at community and district levels.

The pertinent implication from these findings was that common rent-seeking techniques, which are part of the day-to-day implementation politics such as distortion, manipulation, and misrepresentation of information may have an unprecedented impact on important healthcare interventions. Alternatively, these politics may potentially divide communities and therefore weaken the bases for strong community partnership. As the literature suggests, strong community partnership, which presupposes cooperation between communities, health workers, and the government at different levels are critical for successful governance of community financed health care interventions and responsive primary health services delivery (Mangold et al., 2014; Mitchell and Shortell, 2000; Wildridge et al., 2004). This is more likely to be a case when it comes to the interventions for addressing health problems of the rural remote communities whose majority have lower levels of education and the access to alternative information sources is insufficient.

Our findings have also revealed the use of dyadic collaborations by bureaucratic employees to protect each other and suppress possibilities of being held accountable for medicine availability as well as the competition to become autonomous over the actors who seek to protect community interests including elected community leaders and members of HFGCs. These findings suggest that health professionals and bureaucrats are pessimistic with the idea of decentralization of healthcare management and governance, which seems to subject them to the control of the lay community actors. As the literature suggests, the traditional perspectives, which suggest that health care programs and interventions planning and implementation are specialized functions that should be performed by health care professionals only are still influential despite the dominantly growing paradigms that emphasize that place emphasis on participation of communities in healthcare management and governance (Booker et al., 1997; Charles and DeMaio, 1993). The main reason is that health professionals and bureaucrats believe that based on their knowledge and skills they are capable of making the best health care plans and decisions; thus, they would not like to work under control of lay community actors or surrender control over resources to these actors (Evans and Harris, 2004). The findings support previous evidence from the literature that implementation is not necessarily a science; instead, it is a political process, which entails the struggle to further personal interests, and attain and retain power and control over resources (Birner and Wittmer, 2000; Grindle, 2017; Lasswell, 1950). Indeed, health care services delivery involves allocation of resources and it is one among the criteria used to evaluate the performance of the government, its institutions, and officials at different levels. Therefore, implementation of the CHF as a solution for addressing problems of political concern, such as medicine availability, cannot be sheltered from the politics of implementation as it is for the delivery of other services such as water and education.

Our findings have shown that there were different perceptions associated with persistence of stock-outs of essential medicine and medical items in the primary health facilities. Most outstanding were the feelings that the government and its institutions had deserted the rural communities in favor of the urban ones. Very limited trust in health workers, government leaders, and officials as well as all other persons who were economically or socially successful and influential as responsible for persistence of stock outs. In connection to the persistence of stock outs, these findings support the observation that the increasing mistrust and the lack of legitimacy and confidence in health workers and other community-level primary healthcare stakeholders have placed the CHF in a crisis of legitimacy (Kamuzora and Gilson, 2007; Mtei and Mulligan, 2007; Stoermer et al., 2011). The findings suggest that communities have generally lost confidence in the idea that community-

financed health care could be a viable solution to the chronic shortages of medicines, which they have experienced for a long time. Further, the crisis of legitimacy is also revealed through evidence of deteriorating relationship between communities on one hand and their key grassroots leaders and officials who are all perceived as corrupt and unaccountable because they appear to be close to health workers or lacking concern for the pains that communities experience because of the stock-outs. The findings have also indicated that stock-outs were a source of frustrations, which undermines the potential of achieving improved services delivery through health workers' motivation and commitment. This suggests that in the biomedical era, having trained health workers or a well-developed network of health facilities may not lead to improved health services delivery if there is no medicine (Barrett et al., 2003). Overall, the performance and capacity of modern health systems to deliver better services depend on the availability of medicine and medical items and the willingness of communities to use the services.

These perceptions, which have connection with politics, political propaganda, and the limited capability of the rural communities to evaluate the information before them have detrimental implications on medicines' availability, primary health care financing, and the general oversight of primary health services delivery. It is largely consensual that success and sustainability of community-based health financing might be challenging if communities do not perceive themselves as responsible owners and partners in financing and governing primary health care including medicine. Similarly, owing to the widespread perceptions that perennial stock outs resulted from theft and misuse of money and medicine, strengthening the trust that resources mobilized from communities would be managed efficiently and effectively is crucial for increasing enrollment and motivation to pay among community members. This is important for attracting adequate financial resources for ensuring availability and accessibility of medicines by all, especially the poor. Frustrations of the health workers, which result from medicine stock-outs stand as a critical threat to the ongoing government strategies to attract trained health workers to work in the remote rural communities. The findings agree with previous studies, which found that satisfaction with working conditions rather than monetary and material incentives was a primary motivator (Manongi and Marchant, 2006; Prytherch et al., 2013).

The increasing reliance on informal drug sellers and poorly regulated self-medication place the rural populations at health risks, which may include deaths and developing serious drug resistance (Chang et al., 2017). Therefore, strengthening communities' awareness, legitimacy, trust, and oversight on both the CHF and officials who participate in its management and governance at community and district levels in order to increase medicine financing from community sources seems to be imperative for addressing the stock-outs of medicines in primary health facilities. Indeed, empowering communities and placing control over money and medicine in their own hands could be the most feasible strategy for detaching from the politics of stock outs.

This study has contributes to the existing knowledge on the causes of the persistence of stock outs of medicine and medical items in rural primary health facilities paying attention to the contribution of the politics arising from the implementation of the CHF. Understanding the influence of politics is important since it provides an alternative framework for understanding how unforeseen forces such as competition for power, struggle for authority, and the use of power to retain autonomy and control over the resources affect the best-designed interventions in health care. Our findings are important since they lay ground for understanding the gaps between the actual policy intentions of the CHF as a community-based scheme for financing medicine and

the unprecedented drawbacks that arise from the politics of implementation and struggle for power and allocation of resources in the communities. As research has suggested, this area invites further research since the existing research has always focused on the technical, administrative, and economic forces that are associated with stock-outs while neglecting the politics of implementation (Borrell et al., 2007; Vicente Navarro et al., 2006). Implementation politics are important, especially in countries where governments are seeking to concentrate on financing more strategic components of the health systems such as health technology, health information systems, human resources, and infrastructure while encouraging communities to mobilize resources and finance the day-to-day delivery of health services including Tanzania.

In our study, we identified a few limitations worth acknowledging. The first limitation arises is that in both the interviews and focus group discussions, participants reported their experiences based on recalling past events within the course of implementing the CHF and their participation in the governance of primary health care. Despite the triangulation of sources, we could not be 100 percent certain that all the responses were free of recall bias, exaggeration, factual errors, or forgetting. These may compromise the validity of the findings. The second limitation was that we conducted a study in a single district while the problem of stock outs exists in all the rural facilities. Likewise, the implementation of the CHF has been ongoing in all the districts in Tanzania. Therefore, our findings may have limited generalizability to other communities given cultural and context-based interpretations.

5. Conclusion

The study showed how the politics that arise from the management of the CHF contribute to the persistence of essential medicine and medical items' stock-outs in rural primary health facilities. It has also revealed the dominant perceptions that resulted from stock-outs and how they influence communities' perceptions on their role in health care financing and governance as well as the relationship between communities and health workers. From our findings, it is clear that the politics related to the CHF and stock outs coexist symbiotically; their relationship creates a chicken and egg causality dilemma. The politics related to the CHF constrain successful resources mobilization and oversight by communities while stock outs undermine trust, legitimacy, and acceptability of the CHF in the communities. To be precise, the politics of the CHF and the stock-outs in primary health facilities form a vicious cycle where the lack of adequate locally mobilized financial resources contribute to the acute shortages of medicines and medical supplies while the acute shortage of medicine and medical supplies in the facilities discourages communities from paying CHF contributions. Therefore, while other factors such as low government financing, inadequate medicine supply systems, and inability to establish the actual demand of medicines might have connection with stock-outs, the politics related to the governance and management of the CHF significantly contribute to the persistence of medicine stock-outs in primary health facilities, especially considering the rural communities' context.

A focus on how politics affect the implementation of health care programs as it has been demonstrated in this study is important since both health problems and politics exist in all living communities. Increasingly, health practitioners and activists take ‘politicization of healthcare’–allowing political interests to shape health

services delivery and healthcare innovations as an undesirable threat to communities' health and well-being. This is indeed forgetting that as Plato (428/427 - 348/347 BCE), the ancient Greek philosopher suggested, man is a political animal; politics exist in all communities and drive all human affairs including health care. The best way of mitigating the negative effect of politics in the execution of policies and programs is to make communities capable of understanding and dealing with politics in such a way that they are politics. Therefore, it is not easy to solve the puzzle of medicine stock-outs in rural primary health facilities without making communities aware of the existence and essence of the politics of medicine financing and availability, building trust, increasing the legitimacy of the CHF, and empowering community members to mobilize and control the use of locally available resources.

Abbreviations

CHF: Community Health Fund; DED: District Executive Director; DMO: District Medical Officer; eLMIS: electronic Logistics Management Information System; HFGC: Health Facility Governance Committee; ILS: Integrated Logistics System; MSD: Medical stores Department; PPP: Public-Private Partnership; VEO: Village Executive Officer; VIMS: Vaccine Information Management System

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References

Anderson, R. (2007), Thematic content analysis (TCA): descriptive presentation of qualitative data, *available at* http://www.sciepub.com/reference/142452 (accessed 16 February 2017)

Barrett, B., Marchand, L., Scheder, J., Plane, M.B., Maberry, R., Appelbaum, D., Rakel, D. and Rabago, D. (2003), "Themes of holism, empowerment, access, and legitimacy define complementary, alternative, and integrative medicine in relation to conventional biomedicine", *The Journal of Alternative & Complementary Medicine, Vol. 9* No. 6, pp. 937-947.

Bernard, H.R. and Ryan, G. (1998), "Text analysis", Bernard, H.R and Gravlee, C.C. (Ed.), *Handbook of Methods in Cultural Anthropology*, Rawman and Littlefield, London, pp. 595-645.

Bernard, H.R. and Ryan, G.W. (2009), *Analyzing Qualitative Data: Systematic Approaches*, SAGE Publications.

Birner, R. and Wittmer, H. (2000), "Converting social capital into political capital", how do local communities gain political influence, a theoretical approach and empirical evidence from Thailand and Colombia" paper presented at the 8th conference of the International Association for the Study of Common Property, 31 May -4 June 2000, Bloomington, Indiana, available at https://ostromworkshop.indiana.edu/library/node/71987, (accessed 11 March 2016)

Booker, V. K., Robinson, J. G., Kay, B. J., Najera, L.G. and Stewart, G. (1997), "Changes in empowerment: effects of participation in a lay health promotion program", *Health Education & Behavior,* Vol. 24 No. 4, pp. 452-464.

Borrell, C., Espelt, A., Rodríguez-Sanz, M. and Navarro, V. (2007), "Politics and health", *Journal of Epidemiology and Community Health,* Vol. 61 No. 8, pp. 658-659.

Boyce, C., and Neale, P. (2006), *Conducting In-Depth Interviews: A Guide for Designing and Conducting In-depth Interviews for Evaluation Input*, Pathfinder International, Watertown.

Bradley, E.H., Curry, L.A. and Devers, K.J. (2007), "Qualitative data analysis for health services research: developing taxonomy, themes, and theory", *Health Services Research,* Vol. 42 No. 4, pp. 1758-1772.

Cameron, A., Ewen, M., Ross-Degnan, D., Ball, D. and Laing, R. (2009), "Medicine prices, availability, and affordability in 36 developing and middle-income countries: a secondary analysis", *Lancet,* Vol. 373, pp. 240-249.

Chang, J., Ye, D., Lv, B., Jiang, M., Zhu, S., Yan, K., Tian, Y. and Fang, Y. (2017), "Sale of antibiotics without a prescription at community pharmacies in urban China: a multicentre cross-sectional survey", *Journal of Antimicrobial Chemotherapy,* Vol. 72 No. 4, pp.1235-1242.

Charles, C. and DeMaio, S. (1993), "Lay participation in health care decision making", a conceptual framework", *Journal of Health Polit Policy Law,* Vol. 18 No. 4, pp.881-903.

Denzin, N.K. and Lincoln, Y. S. (2008), *Collecting and Interpreting Qualitative Materials* (Vol. 3), Sage, London.

Dutta, A. (2015), "*Prospects for sustainable health financing in Tanzania*", available at: https://www.healthpolicyproject.com/pubs/788_ProspectsforSustainableHealthFinanciFINAL.pdf, (accessed on 11 June 2015).

Eng, E. and Young, R. (1992), "lay health advisors as community change agents", *Family & Community Health,* Vol. 15 No. 1 pp.24-40.

Evans, T. and Harris, J. (2004), "Street-level bureaucracy, social work and the (exaggerated) death of discretion", *British Journal of Social Work,* Vol. 34 No. 6, pp.871-895.

Ewen, M., Kaplan, W., Gedif, T., Justin-Temu, M., Vialle-Valentin, C., Mirza, Z.,Regeel, B., Zweekhorst, M. and Laing, R. (2017), "Prices and availability of locally produced and imported medicines in Ethiopia and Tanzania", *Journal of Pharmaceutical Policy and Practice,* Vol. 10 No. 1, pp. 1-9.

Falisse, J., Meessen, B., Ndayishimiye, J. and Bossuyt, M. (2012), "Community participation and voice mechanisms under performance-based financing schemes in Burundi", *Tropical Medicine and International Health,* Vol. 17 No. 5, pp. 674 - 682.

Frumence, G., Nyamhanga, T., Mwangu, M. and Hurtig, A.K. (2014), " Participation in health planning in a decentralised health system: experiences from facility governing committees in the Kongwa district of Tanzania", *Global Public Health,* Vol. 9 No. 10, pp. 1125-1138.

Goetz, A.M. and Jenkins, R. (2002), "Voice, accountability and human development: the emergence of a new agenda", Available at http://www.undp.org (accessed 11 January 2017).

Grindle, M.S. (2017), *Politics and Policy Implementation in the Third World*, Princeton University Press, New Jersey.

Gusfield, J.R. (1975), *The community: A critical response*, Harper Colophon, New York.

Hogerzeil, H.V. (2006), "Essential medicines and human rights: what can they learn from each other?" *Bulletin of the World Health Organization, Vo*l. *84* No. 5, pp. 371-375.

Hwang, S.W., Ueng, J. J., Chiu, S., Kiss, A., Tolomiczenko, G., Cowan, L., Levinson, W. and Redelmeier, D.A. (2010), "Universal health insurance and health care access for homeless persons", *American Journal of Public Health,* Vol. 100 No. 8, pp. 1454-1461.

Jick, T.D. (1979), "Mixing qualitative and quantitative methods: triangulation in action", *Administrative Science Quarterly*, Vol. 24, No. 4, pp. 602-611.

Kamuzora, P., and Gilson, L. (2007), "Factors influencing implementation of the Community Health Fund in Tanzania", *Health Policy Plan,* Vol. 22 No.2, pp. 95-102.

Kessy, F.L. and Ramsey, D. (2014), "Improving health services through community participation in health governance structures in Tanzania", *Journal of Rural and Community Development,* Vol. 9 No. 2, pp. 14-31.

Khuluza, F. and Heide, L. (2017), "Availability and affordability of antimalarial and antibiotic medicines in Malawi",*PLoS ONE*, Vol. 12 No. 4, pp. 1-15.

Knaul, F.M., González-Pier, E., Gómez-Dantés, O., García-Junco, D., Arreola-Ornelas, H., Barraza-Lloréns, M., Sandoval, R., Caballero, F., Hernández-Avila, M., Juan, M., Kershenobich, D., Nigenda, G., Ruelas, E., Tapia, R., Soberón, G., Chertorivski, S. and Frenk, J. (2012), " The quest for universal health coverage: achieving social protection for all in Mexico", *The Lancet,* Vol. 380 No. 9842, pp. 18-24.

Lasswell, H.D. (1950), *Politics: Who Gets What, When, How*, P. Smith, New York.

Management Sciences for Health (MSH). (2007), "Improving child health through the accredited drug dispensing outlet program: baseline survey from five districts in Tanzania", available at http://pdf.usaid.gov/pdf_docs/PNADK494.pdf (accessed 11 March 2017).

Mangold, K., Denke, N.J., Gorombei, D., Ostroski, T.L., and Root, L. (2014), "Principles of Successful Partnerships", *Nursing Administration Quarterly, Vo*l. *38* No. 4, pp. 340-347.

Manongi, R.N. and Marchant, T.C. (2006), " Improving motivation among primary health care workers in Tanzania: a health worker perspective", *Human Resources For Health,* Vol. 4 No. 1, pp.1.

McMillan, D.W., and Chavis, D.M. (1986), " Sense of community: a definition and theory", *Journal of Community Psychology,* Vol.14 No. 1, pp. 6-23.

Mikkelsen-Lopez, I., Shango, W., Barrington, J., Ziegler, R. and Smith, T. (2014), " The challenge to avoid anti-malarial medicine stock-outs in an era of funding partners: the case of Tanzania, *Malaria Journal,* Vol. 13 No.1, pp.1-9.

Mitchell, S. and Shortell, S.M. (2000), "The governance and management of effective community health partnerships: a typology for research, policy, and practice", *Milbank Quarterly, v*ol. *78* No.2, pp. 241-289.

Morgan, D.L. (1996), *Focus Groups as Qualitative Research* (Vol. 16), Sage publications.

Mtei, G., and Mulligan, J. (2007), *Community Health Funds in Tanzania: a Literature Review*, Ifakara Health Institute, Dar es Salaam.

Mtei, G., Makawia, S., Ally, M., Kuwawenaruwa, A., Meheus, F. and Borghi, J. (2012), " who pays and who benefits from health care, an assessment of equity in health care financing and benefit distribution in Tanzania", *Health Policy Plan,* vol. 27 No 1 (supp), pp. i23-i34.

Navarro, V., Muntaner, C., Borrell, C., Benach, J., Quiroga, A., Rodríguez-Sanz, M., Vergés, N. and Pasarín, M.I. (2006), " Politics and Health Outcomes", *The Lancet*, Vol. 368, pp. 1033–1037.

Pope, C., Ziebland, S. and Mays, N. (2000), "Analysing qualitative data", *British Medical Journal,* Vol. *320* No. 7227, pp. 114-116.

Prytherch, H., Kagoné, M., Aninanya G.A., Williams, J.E., Kakoko, D.C., Leshabari, M.T., Ye, M., Marx. and Sauerborn, R. (2013), "Motivation and incentives of rural maternal and neonatal health care providers: a comparison of qualitative findings from Burkina Faso, Ghana and Tanzania", *BMC Health Services Research,* vol. 13 No. 149, pp.1-15.

Ryan, G.W. and Bernard, H.R. (2003), "Techniques to identify themes", *Field Methods,* Vol. 15 No.1, pp.85-109.

Sikika. (2011), "Medicines and medical supplies availability report : a case of 71 districts and 30 health facilities across mainland Tanzania", available at http://sikika.or.tz/wp-content/uploads/2013/09/medicines-and-medical-and-supply-availability-report.pdf, (accessed 11 March 2017).

Smith, C.P. (1992), *Motivation and Personality: Handbook of Thematic Content Analysis*, Cambridge University Press.

Stake, R.E., and Savolainen, R. (1995), *The Art of Case Study Research*, Sage Publications, Thousand Oaks.

Stoermer, M., Radmacher, R. and Vandehyden, M. (2011), "Transforming Community Health Funds in Tanzania into viable social health insurance schemes: the challenges ahead", available at http://edoc.unibas.ch/dok/A6165240 (accessed 22 May 2016).

Thomas, D.R. (2006), "A general inductive approach for analyzing qualitative evaluation data", *American Journal of Evaluation,* Vol. 27 No. 2, pp. 237-246.

Turshen, M. (1977), "The impact of colonialism on health and health services in Tanzania", *International Journal of Health Services, Vo*l. *7* No. 1, pp. 7-35.

Turshen, M. (1984), *The Political Ecology of Disease in Tanzania*, Rutgers University Press, New Jersey.

URT. (1990), *National Health Policy*, Ministry of Health and Social Welfare, Dar es Salaam.

URT. (2007), *National Health Policy 2007*, Ministry of Health and Social Welfare, Dar es Salaam.

URT. (2007a), *National Education and Training Policy,* Ministry of Education and Culture, Dar es Salaam.

Wales, J., Tobias, J., Malangalila, E., Swai, G. and Wild, L. (2014)," Stock-outs of essential medicines in Tanzania: a political economy approach to analysing problems and identifying *solutions*" available at http://www.twaweza.org/uploads/files/Stock-outs%20of%20essential%20medicines%20in%20Tanzania%20-%20ODI%20&%20TWA%20-%20final%20March2014.pdf (accessed 12 March 2017).

Wangwe, S.M., Semboja, H. and Tibandebage, P. (1998), *Transitional Economic Policy and Policy Options in Tanzania* (Vol. 1), Mkuki Na Nyoka Pub, Dar es Salaam.

Wiedenmayer, K. (2004), "Access to medicines –medicine supply: Lessons learnt in Tanzania and Mozambique, available at http://www.who.int/medicinedocs/documents/s18422en/s18422en.pdf*, (accessed 15 March 2015).*

Wildridge, V., Childs, S., Cawthra, L. and Madge, B. (2004), "How to create successful partnerships—a review of the literature, *Health Information & Libraries Journal,* Vol. *21* No. 1, pp. 3-19.

Yang, H., Dib, H. H., Zhu, M., Qi, G. and Zhang, X. (2010), "Prices, availability and affordability of essential medicines in rural areas of hubei province, China", *Health Policy* Plan, Vol. 25 No. 3, pp. 219-229.

Yin, R.K. (2012), *Applications of Case Study Research*, Sage, London.

Yin, R.K. (2013), *Case Study Research: Design and Methods*. Sage Publications, London.