

Factors Associated With Low Enrollment to Community Health Fund (CHF) in Mkuranga District- Pwani, Tanzania

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Abstract:-

Background: Despite the 15 years of promotion of Community Health Fund (CHF) in Tanzania, overall membership has remained low and this has led to an increase in mortality and morbidity due to unaffordability of health services.

Materials and methods: The study was descriptive cross-sectional study. One hundred and thirty consenting were selected purposively and randomly and interview and questionnaires were used to collect the data to identify the major factors associated with CHF enrollment. Quantitative data were analyzed by using STATA and qualitative data were analyzed based on the major themes by a process of content analysis. A p-value of less than 0.05 was considered statistically significant, at 95% confidence interval.

Results: Demographic factors, lack of CHF awareness, failure to understand the CHF benefits and poor attendance to CHF sensitization meetings were the factors associated with low CHF enrollment (p-value >0.05). Socio economic factors showed strong association with CHF enrollment. Unavailability of drugs (75%) and lack of training about CHF (100%) were the major challenges faced by health workers.

Conclusion: The strategies to improve CHF enrollment were political leaders' involvement in community sensitization, district support to most vulnerable groups, health service quality improvement and conducting regular community sensitization.

Key words: Community Health Fund, enrollment, Mkuranga district council.

Africa, face problems like tight public health care budget and inaccessibility to basic health care to population in rural areas and informal sectors. As a result, the country introduced different health financing mechanisms namely; user fees, health insurance, and community health funds (CHF) so as to facilitate individual contributions in accessing health services.

Tanzania uses a mixture of health financing mechanisms: taxation, donor funding, health insurance (both private and national), user fees and CHF (URT, 2011). Act No. 1 of 2001 introduced the CHF which is the prepayment scheme. The scheme was first introduced in the country as a pilot in 1996 in Igunga District (Government of Tanzania, 1999). CHF is a pre-payment council's-based scheme aimed at facilitating the community to access health care at an affordable premium that is determined by the community itself. It is expected that household will be well informed about their benefits and choose themselves to join into the CHF. CHF management and principal stakeholders include; community, ward leadership, local authorities and health providers. From the CHF management, funds are being pooled from many households so as to incorporate the fundamental insurance principles of risk pooling. This enables the CHF to cover expenses of health care services required by its members.

Households which have not joined CHF pay out of pocket in order to access health services. For the low-income families sometimes it had been difficult to access the services (MOH, 1999). Despite the fact that it's through the community's and council's meeting is where premium for this scheme is determined but still the enrollment rate to this scheme is low. CHF has been on implementation for more than 15 years, in 119 councils reports show that there are several challenges which retard CHF success (NHIF, 2011; Kamuzora & Gilson, 2007). The main challenges are low CHF enrollment (only 24%) which is lower than the national target of 70% set in 2010 (NHIF, 2019; NHIF, 2010). Lack of transparency on the management of the funds has contributed to members drop out tremendously like how it happened in councils like Nzega and Hanang (Mhina, 2005; Chee and Smith, 2001). Other

I. INTRODUCTION

About 1.3 billion people around the world are poor and lack access to effective and affordable health as a result of weaknesses in the financing and delivery of health care (World Bank, 2007; WHO, 2000; Dror & Firth, 2014). World Health Organization (WHO) health financing policy emphasizes that the health insurance as a financing strategy is a key determinant to population health and well-being (WHO, 2007). This is particularly true in the poorest countries where the level of health spending is still insufficient to ensure equitable and universal access to needed health services and interventions. Tanzania like many countries in Sub-Sahara

challenges are limited awareness of the scheme to the wider community, sustainability of the scheme and non-utilization of CHF revenue for service improvement.

Several studies in Tanzania has been done but still there is limited information on factors associated with low enrollment to CHF among the community members (Raasveld et al., 1993; Borghi et al., 2013; Kamuzora & Gilson, 2007; Kapologwe et al., 2017). Studied from other countries has shown that inadequate funding, high poverty levels among the population, unawareness of the people on the operation of the community based health financing scheme, trust in the scheme management and low quality of the services from the health facilities are the reasons for the people to drop out and not to re-enrol into the schemes (Chalkidou et al., 2016); Panda, Chakraborty, Dror, & Bedi, 2014; Owusu-Sekyere & Chiaraah, 2014; Kohli & De Blasi, 2017; Basaza, 2009; Acharya et al., 2013).

Little is known on factors associated to low enrollment to CHF among the community members in Tanzania. Our study sought to explore whether social economic, demographic, individual and health system related factors if they are associated with low enrollment to CHF given that out of 51,249 households at Mkuranga, only 7.6% of the household were enrolled into CHF which indicates there is low enrollment compared to the National goal of an enrollment rate of at least 30% per district (NHIF, 2010).

II. METHODOLOGY

Study design

Descriptive cross-sectional study was designed and it employed a concurrent mixed method.

Study setting

The study was conducted in Mkuranga District which is among 7 councils of Pwani region. Mkuranga is located in eastern part of the region, and has 4 divisions, 18 wards and 121 registered villages with an average area of about 2432 km² with a population of 222,921 people. The main economic activity is agriculture whereby about 85% of all population engaged in small scale farming (Torell & Mmochi, 2006). CHF enrollment is only 7.6% while the national target is 30% and the regional rate of enrollment is about 13% which is lower than the national target of 70% set in 2010 (NHIF, 2010).

Sample size determination, study participants and sampling

Sample size was calculated by using the Cochran formula to obtain an optimal sample size of respondent which will reflect the idea of entire population (Cochran, 1977). Assuming the proportion for CHF enrollment in the country is 8.6%, the margin of error of 5% and the standard normal value (1.96) under the 95% confidence limit, the required sample size was

120. For qualitative data purposive sampling was applied and sample size was determined with saturation point whereby for this reason, 10 participants were involved in the study. A multistage sampling method was used to select participants in this study. From the district level, wards were differentiated from urban and rural cluster; each from urban and rural randomly selected to get number of respondents to be involved in the study. The sampling units were the number of households and health facilities while the study units were heads of household and health workers respectively.

Data collection and analysis

Data collection was conducted by one trained research assistant. The data collection tools were interview guide for the qualitative data and structured questionnaires and checklist were used in quantitative study for community members and health workers respectively. The data collection tools were pretested at Miale village to ascertain its reliability and adjustment were done. Both tools were translated into Swahili for easy administration during field work. All completed data collection tools were examined for clarity and consistency.

Analysis of qualitative data used the specific objectives as major themes, in which sub themes were identified by a process of content analysis. STATA version13 was used for quantitative data analysis, statistical test and chi-square was done in order to assess the association between dependent and independent variables. Since the study was a concurrent mixed method therefore side-by-side comparison for merged data analysis which involved presenting the quantitative and qualitative findings together in a discussion was applied (Creswell, 2013).

Ethical consideration

The research was approved by Mzumbe University and written permission to conduct

the study was obtained from the District Executive Director of Mkuranga District Council. Written and verbal consent was obtained from the study participants prior to participation in the study. All information collected was kept confidential and used only for the intended objective of the study

III. RESULTS

Background characteristics of study participants

A total of 120 people consented participated in this study and among them more than half (62%) were male while 38% were females and their age ranged between 35-90 years. The distribution of respondents is as shown in Table 1.

Table I: Summary of the Social Demographic Characteristics of the Respondents.

Variable	Attribute	Frequency(n)	Percentage (%)
Sex	Female	46	38
	Male	74	62
Age group	<35	47	39
	35-55	55	46
	56-90	18	15
Marital status	Married	98	81
	Cohabiting	5	4
	Divorced	9	8
	Widow	8	7
Level of education	None	15	1
	Primary	72	7
	Secondary	12	11
	Certificate	9	1
	Degree and above	10	1

Source: Field data, 2016

Factors associated with CHF enrollment

The data from the field has come up with different factors which are associated with the enrollment to the CHF among the community members of Mkuranga District. Among the factors, some were significantly associated with enrollment while others were not as explained.

Individual Factors Associated with CHF Enrollment

A total 120 respondents were asked if they were aware about CHF and how it operates. The essence of this question was to know to what extent are the respondents informed about the CHF hoping that if they are aware of it and how it operates, they will have a good chance to decide whether to be a member or not.

The data from the field showed that 17% of the participants have heard about it and were members while 49% of respondents have heard about CHF and they were not members. Fifty one percent (51%) of respondents who have never heard about CHF were not enrolled into it. This implies that there is high association between getting information about CHF and CHF enrollment ($p=0.000$). Health providers brochures/posters and friend/relatives were the source of information among those who have ever heard about CHF (41%). It was also found that 20 people who attended CHF sensitization meeting, 7 respondents (41%) enrolled themselves into CHF while 13 respondents (16%) have not enrolled into CHF. This data show significant relationship between sensitization meeting attendance and CHF enrollment. Among the study respondents who were CHF members, 88% said they benefit from being a CHF member while 12% said they don't know the benefits of being a CHF member. Furthermore, the result has shown that there is an

association between costs incurred to reach the nearby government health facility with CHF enrollment.

Socio Economic Factors Associated with CHF Enrollment

Among the 57 respondents who were living nearby the health facility (0.5-2.5km), 13 respondents were members of CHF making a total of 76% of the total district enrollment rate and (17%) among the study respondents while 44 respondent (53%) living at the same distance did not enroll to CHF ($p=0.223$) meaning that there is no association between the distance to the health facility and CHF enrollment. The family size was a factor which was associated with CHF enrollment ($p=0.013$) as the household which had 2-4 children were less likely to enrolled while households with 5-6 children were enrolled and for the family with 7 and above children (13 households) were enrolled while the remaining 8 households from this group were not enrolled.

Family income earned per month was taken into consideration during this study and the has shown that those who earn from 10,000-50,000Tsh per month did not enroll to CHF while those who earn 60,000-100,000Tsh were 26 households and among them (28%) did not enroll to CHF. For those who earned 100,000 Tsh and above (20) respondents did not enroll to CHF and those earned 100,000Tsh and above were 20 respondents and they contribute to 5(29%) and 15(18%) to both district enrollment and non-enrollment rate respectively. These results imply that there is no significant association ($P=0.691$) between family income with CHF enrollment. The cost to reach Health Facility showed an association with CHF enrollment ($p=0.014$).The respondents who were paying 1000-3000Tsh for transport were not CHF members (85%) while those who were not paying any transport cost were CHF members. These results were also reported from World Health Organisation as many people who are living in rural areas faced with this problem as the result, they fail to join into community health insurance. Moreover, if services are not available close to where people live people fail to use them even if they are free of charge (WHO, 2010). When respondents were asked about their opinion on the CHF premium, 88% of those who were enrolled into CHF said that the CHF premium is small and affordable by majority while 12% said that the CHF premium was high.

Health Facility Factors

Lack of community sensitization meeting was among the factors which contributed to lack of CHF awareness hence low CHF enrollment within the district. Regarding attendance to sensitization meetings, there were only 20 respondents who have ever attended CHF sensitization meeting, among them 7 respondents (41%) were enrolled into CHF while 13 respondents (16%) were not enrolled.

Form this data it showed that there is significant relationship between sensitization meeting attendance and CHF enrollment for 70 respondents (80%) of those who were not enrolled have never attended any sensitization meeting. One of the

respondents from qualitative interview had this suggestion to the government:

“The government should make good arrangement to provide education to the community. Even if the community sensitization about CHF is done in different meetings, but this is not enough. If possible, village health workers should be involved in community sensitization for it will be easy for them to move from one household to the next in all villages in order to make sure that everyone could be reached as an individual. The voice should be heard to every person and if there will be any question; he/she will be given the answer/clarification for understanding”.

With regard to sensitization for creating awareness to community, Marwa, (2009) also pointed out that the lack of community sensitization is the factor contributed to low CHF enrollment in Magu district, Tanzania for the community are unaware of CHF and how it operates.

Furthermore, the data from the study has revealed that on the course of delivery of health services the health providers have been experiencing two challenges which were unavailability of drugs and lack of training concerning CHF. Lack of training was mentioned almost by all health providers as 60% of the respondents strongly agree and 40% agree. From the interview it was also reported that:

“Though I know that in the government hospital there are people who are more professional than those who are working in private health facilities, when you reach a government hospital and found that drugs are available, you are sure that your problem will be properly solved due to knowledge which health workers do possess but sometimes it is not done to your expectation due to unavailability of drugs and medical supplies”

IV. DISCUSSION

The study aimed at determining the factors associated with low CHF enrollment in Mkuranga District Council. We found out that on individual factors the failure to understand how CHF operate together with its benefit and poor attendance to CHF sensitization meetings were significantly associated with enrollment to CHF. This result concur with the study which was done in Uganda whereby lack of basic information in the community health insurance schemes had been one of the major reason for low enrollment as it limits someone to get a proper understanding of scheme’s, design and operations (Basaza, Criel, & Van Der Stuyft, 2007). Also, there was an association between the transport cost and CHF enrollment as it was pointed out by some of the respondents that:

“Lack of CHF awareness was observed among both community and health workers, it was noted that there is no proper information about CHF as most of the people in the study declared of never heard about”.

Since there had been several strategies for awareness creation whereby some study respondents were aware of them, it

implies that the proper strategies for awareness creation should be implemented so as to ensure majority accessibility on CHF information as awareness has significant association with the CHF enrolment. With regard to this some respondents advised that the village health workers should be involved into community sensitization in order to be able to go from one house to another to create awareness. This could sound well as for those who had no transport fee could be easily reached without paying the transport cost to attend the meeting,

Furthermore, the study showed that families with many children (9 and above) were enrolled 18 times more than those with few children this may be due to low income that’s why those families with larger number of children prefers to join into CHF. This result is contrary to study by Olaniyan & Sunkanmi, 2012 which showed that as the family size increases, meeting the health care needs become problematic. Beneficiary preferences and the decision to uptake insurance is affected by household size for it serves a possible hindrance to enrolment for it creates excess expenditure on ensuring all family members. This implies that for the CHF, enrolment would have been very higher as there a lot of people who can enrol under the one principle member contrary to other insurance scheme which have a small number of people to enrol under the same principle member. Shortage of drugs was a major factor which caused many people not to enroll into CHF. This was agreed by all the service providers for they experience it during provision of health services. This makes the community not enroll into CHF as it brings no difference for all (CHF members and non-CHF members) will all have to buy medicine when they are sick. Furthermore, the respondents said that the qualities of services in public facilities are poor due to shortage of drug. Some of the respondents said that:

“As I passed through asking my people, I’ve never heard another problem apart from that. They said that they are ready to join into CHF but the problem of shortage of drugs in government health facilities are their reasons of not enrolling to CHF”

If the community were enrolled at a high rate funds could be enough as the district will receive enough matching fund which will support the health budget a bit and drugs could be available throughout in public health facility.

This was also pointed by Turkerson of Ghana that poor quality of healthcare in rural Ghana resulted in loss of customers, revenue and hence low effectiveness and efficiency to community health funds (Turkson, 2010).

V. CONCLUSION AND RECOMMENDATION

Conclusively awareness creation on the benefit of being a CHF member has to be done regularly so that community members become well informed about CHF. Also, the health facility management should make sure that the facility gets all the essential medication so as the CHF enrollee to get the

drugs whenever they need at the facility. Council Management Team (CMT) with collaboration to CHMT should take special efforts to improve the quality of health care services provided at health facilities. CHF enrollment should be considered as the permanent agenda so as to address the challenges including the council to take the responsibility identifying the most vulnerable groups and paying the premium in order to ensure health service are accessible to all as its required by the UHC.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest related to this manuscript.

AUTHORS' CONTRIBUTIONS

MJC designed the study, collected the and analyzed the data; BM drafted the first manuscript and critically reviewed it.

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