East African Medical Journal Vol. 98 No. 6 June 2021
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Lucy Wanza, Kakuyuni Level 3 Hospital in Kangundo sub-county, Machakos County and a student at the Jomo Kenyatta University of Agriculture and Technology (JKUAT), P.O. Box 164 Masii, Kenya, Grace Wambura Mbuthia (PHD), Department of Community Health Nursing, College of Health Sciences, Jomo Kenyatta University of Agriculture and Technology (JKUAT). P. O. Box 62 000 – 00200, Nairobi, Kenya, Peter Nyobendo Monda (MScN), Department of Community Health Nursing, College of Health Sciences, Jomo Kenyatta University of Agriculture and Technology (JKUAT). P.O. Box 62 000 – 00200, Nairobi, Kenya

Corresponding author: Lucy Wanza, Kakuyuni Level 3 Hospital in Kangundo sub-county, Machakos County and a student at the Jomo Kenyatta University of Agriculture and Technology (JKUAT), Kenya P.O. Box 164 Masii, Email: lucykariuki7@gmail.com

COMMUNITY PARTICIPATION IN RURAL HEALTH CARE FACILITY SERVICES IN KAKUYUNI HEALTH CENTRE, MACHAKOS COUNTY

L. Wanza, G.W. Mbuthia and P.N. Monda

ABSTRACT

Background: **Community participation is the collective involvement of local people in assessing and identifying their needs, implementing and evaluating health programs. Community projects project have various phases, assessment, planning, implementation, and monitoring and evaluation phase. Community members should be involved in all phases to own the projects. This study sought to establish the level of community participation in Kangundo Sub-county in rural health care facility services, in Machakos County, Kenya.**

Methods: **Analytical cross-sectional study design was used for this study. 384 respondents from Kakuyuni Location were involved in the study. Structured interviewer administered questionnaire**

Results: **The study found out that most of the community members (n=278, 72.4%) were not involved in any stage of development in community project development cycle in rural health care facility services. As per the results 106 respondents had participated in various stages of project development cycle. Again, 15.4%, (n=59) of the respondents were involved in needs assessment, 9.4% (n=36) at implementation stage. 1.6% (n=6) at monitoring and evaluation, and 1.3% (n=5) were involved in all the stages of development cycle. However, most 72.4%, (n=278) of the respondents were not involved at any stage of development.**

Some factors were significantly affecting community participation; being a county committee member, length of stay in the community and having attended an NGO meeting and community mobilization. Several challenges affected community participation.

Conclusion: **Kakuyuni community members are less involved in rural health care facility projects, whereby the results revealed that only 27.6% of the interviewed population was involved.**

INTRODUCTION

Community participation refers to the action of collective involvement of local people in assessing and identifying their needs, implementing and evaluating health programs and sharing the benefits[1]. In health, it plays a vital role in provision of primary health care (PHC) services to the community. Community participation has been a continuous theme in development discussions for the past 50 years[1].

Community projects have various phases; assessment, planning, implementation, and monitoring and evaluation phase. The community members should be involved in all the phases to own the project[1]. Community is to be involved from need assessment, planning, implementation and evaluation. This is what constitutes a project development cycle[2]. Effective partnerships between residents, the health professionals and stakeholders of health are essential for community-based solutions. This helps by advancing health equity and making community involvement a shared vision and value, by increasing the community's capacity to shape outcomes, and fostering multi-sectoral collaboration[3].

Community participation lays emphasis in PHC collaborations, the residents and health care providers need to work together to participate fully. Partners are able to employ different unique skills and access resources to serve as a variety of roles in rural health care projects. Through all these skills, the Partners get involved in actions and interventions that address the predisposing causes of rural health inequity through engaging the community[4].

Collaborative approach is used, to bring together health care professionals, people using the services in the community setting and citizens to harmoniously develop and deliver rural health services. The key interest in encouraging community participation is by giving decision making powers to the community members. The members will be responsible of their own health and to improve health care outcomes[5]. Community involvement is viewed as a gate way to success in the delivery of health care; however, there seems to be very little or no actual community involvement in the community context[6].

Community participation is affected by absence of sense of ownership. If we accept that communities exist, then it is important for the communities to be involved in all stages of project cycle. This will help in generating their own issues in order of priority for community members to own the projects[7].

In 1978, Alma Ata Declaration set principles to guide the planning, implementation, and evaluation of community-oriented health programs. One of the principles outlined the right and duty of people to participate individually and collectively in planning and implementation of health care. Despite the Alma Ata Declaration principles, community participation has not yet cultivated enough success in the past[8].

Despite the efforts of the government availing policies, guidelines, and community representative organs, actual implementation of community participation has been poorly achieved. The national policy is well defined with greater focus as improved health care delivery services[9].

The level of community involvement in Machakos County, Kenya is not well documented. Therefore, this study sought to establish the level of community participation in Kangundo Sub-county in rural health care facility services, in Machakos County, Kenya.

MATERIALS AND METHODS

Study design: Analytical cross-sectional study.
Study setting: This study was conducted at Kakuyuni sub-location, kangundo Sub-County, Machakos County, Kenya. This

study focused on all adult residents of Kakuyuni location, Kangundo Sub-County. A total of 384 adult residents participated in the study.

Sampling procedure: Kakuyuni residents were sampled using multistage sampling. First, two sub-locations were randomly selected out of the 4 sub-locations of Kakuyuni Location. After that, six villages were randomly selected out of the 12 villages in the sub-location, whereby 3 villages were from each sub-location. This was followed by systemic sampling of the homes in each of the selected villages, whereby every 3rd homestead was interviewed. In the selected homesteads, one adult of sound mind, either male or female was interviewed; this helped to eliminate gender bias.

Data collection tools and methods: Data on Community Participation in rural health care facility services was collected using a structured interviewer administered questionnaire with both open and closed ended questions.

Validity and reliability of data Collection instruments: The data collection tool was pretested at Kivaani sub-location. The pretest was done to ensure that each question was able to capture the information required to answer each study objective. The research supervisors were consulted after the pretest and ambiguous questions were eliminated from the tool to ensure tool validity of data instrument was done prior to the main data collection activity.

Data analysis: The data was coded, entered and analyzed using SPSS version 24 software. Descriptive statistics including frequency distribution and proportions were done for different groups and analysis was done using Pearson's chi square (χ^2). A confidence interval of 95% and p value of 0.05 were used to determine significant results. Binary logistic regression models were conducted, the variables were entered in a forward step wise regression and a model further adjusting for socio-demographic correlates that were statistically significantly associated with community participation was also conducted. The findings were presented in form of table, figures and pie charts.

Ethical considerations: The researcher sought approval from the AMREF Ethics and scientific Review Committee (ESRC). Clearance was through National Commission for Science, Technology and Innovation (NACOSTI) and County Government of Machakos. The respondents were explained on the purpose of the study and a written informed consent was sought from all participants after explaining the objectives of the study; were assured of their right to withdraw from the exercise at any time. The researcher filled in the questionnaire and assured confidentially to the respondent and anonymity. To observe privacy, the collected data was strictly utilized for the intended purpose and was completely inaccessible to anyone not concerned in the study.

RESULTS

Demographic characteristics of the respondents

Majority of the respondents (n=285, 74.2%) in the study were women. The age of the respondents was varied: 73.4% (n=282) were aged between 18-28 years, 14.8% (n=57) were aged between 29-38 years, 8.1% (n=31) were aged between 39 and 48 years while 3.6% (n=14) were aged above 49 years. Among the participants, 89.1% (n=342) were form four leavers, while 10.6% (n=41) of the participants had completed college level of education and 0.3% (n=1) had university level of education.

Table 1

Summary of socio-demographic characteristics of participants

Variable (N=384)	Frequency	Percentage (%)
Gender		
Male	99	25.8
Female	285	74.2
Age		
18-28	282	73.4
29-38	57	14.8
39-48	31	8.1
Above 49	14	3.6
Highest level of education		
Secondary	342	89.1
College	41	10.6
University	1	0.3
Religion of participants		
Christians	373	97.1
Muslims	11	2.9
Period one has been part of the community		
Less than 3 years	53	13.8
More than 3 years	331	86.2

Level of community participation

The study found that only 106 respondents had participated in various stages of project development cycle. The results revealed that, 15.4%, (n=59) of the respondents were involved in needs assessment, 9.4% (n=36) at implementation stage where they were hired to implement the programs, 1.6% (n=6) at monitoring and evaluation, and 1.3% (n=5) were involved in all the stages of development cycle. However, most 72.4%, (n=278) of the respondents were not involved at any stage of development.

Table 2

Community members' participation in project development cycle

Stage of project development cycle	Frequency	Percentage
Needs assessment	59	15.4
Implementation	36	9.4
Monitoring and evaluation	6	1.6
All of the above stages	5	1.3
None of the three (needs assessment, implementation and M&E)	278	72.4

Factors affecting community participation

The table 3 below shows a summary of significant factors that were found to affect community participation in rural health services in Kakuyuni Sub-Location.

Table 3

Association between socio-demographic characteristics of participants and participation in community projects

Variable	Category	Community participation		P value,
		Yes	No	
Gender of participant	Male	85	14	χ^2=0.041 P=0.840
	No	247	38	
Age of participant	18-28	246	36	χ^2=2.259 P=0.520
	29-38	46	11	
	39-48	27	4	
	49 and above	13	1	
Highest level of education	Secondary	294	48	χ^2=0.730 p=0.694
	College	37	4	
	University	1	0	
Religion of participant	Christian	321	52	χ^2=1.774 P=0.183
	Muslim	11	0	
For how long have you lived in this community	Over three years	36	295	χ^2=3.544 P=0.001
	Less than three years	16	37	

p Fisher exact test p value*

Table 4

Other factors affecting community participation in Kakuyuni Sub-Location (N=384)

Variable	Category	Community participation		Chi square vales	P value,
		Yes	**No**		
Community mobilization knowledge	Yes	34	262	χ^2=61.592	P<0.001
	No	18	70		
Attendance on any stakeholders meeting for NGO in the community	Yes	11	3	χ^2=21.199	P<0.001
	No	41	329		
	No				
Community member empowerment	Yes	11	31	χ^2=14.554	P<0.001
	No	41	301		
Being a member of Sub-County health management committee	Yes	13	18	χ^2=14.554	P<0.001
	No	39	314		
Who decided on whom to attend rural health programs	Local authority	250	19	χ^2=14.554	P<0.001
	Community committee	6	7		
	Political leaders	16	6		
	Health workers	45	12		
	All the above	15	8		

Table 5

Binary logistic of significant factors affecting community participation in Kakuyuni Sub-Location (N=384)

Variable	Category	Community participation		Crude Odds Ratio (COR)	Sig	Confidence Interval	
		Yes	No			Lower limit	Upper limit
Knowledge on community mobilization	Yes	34	262	1.982	0.031	0.814	3.611
	No	18	70				
Attendance to any stakeholders meeting for any NGO in the community	Yes	11	3	5.299	0.004	1.609	11.926
	No	41	329				
	No						
community member empowerment	Yes	11	31	2.605	0.011	0.645	4.228
	No	41	301				
Being a member of Sub-County health management committee	Yes	13	18	5.815	0.001	1.112	4.254
	No	39	314				
Who decided on whom to attend rural health programs	Local authority	250	19	1.334	0.002	1.135	1.720
	Community committee	6	7				
	Political leaders	16	6				
	Health workers	45	12				
	All the above	15	8				
For how long have lived in this community	Over three years	36	295	3.544	0.001	1.843	8.331
	Less than 3 years	16	37				

p Fisher exact test p value*

Community participation was at 27.6%. The study assumed community members to be those individuals who had resided in the location for more than three months or those who were permanent residents of that community. The chances for a community member to participate in community projects was determined by a number of variables. Firstly, the study found out that 70.1% (n=269) of those who participated in the community projects were chosen by the local authority (area chief). Fifty-seven participants (14.8%) reported that health workers choose the community members to participate in health care programs in the community and this significantly affected community participation. On analysis, the members who participated in rural health care depended on who choose them, different stakeholders had apart in deciding who should be involved. There was a strong relationship between being a member of the county committees and participation in rural health care facility services.

The study revealed that majority (72.4%, n=278)) of the respondents reported that they have never been involved in such meetings. Most of the respondents felt that healthcare

programs offered within the community are in harmony with the community way of life (88.3%, n=339), and this made them to easily participate. For community participation process, community mobilization was made. Majority of the respondents (n=349, 90.9%) had not heard of campaigns or community mobilization on community participation towards health service delivery in this community of Kakuyuni. On analysis, awareness of the campaigns was not significantly associated with community participation (χ^2=0.147, p=0.702). However, 77.1% (n=296) participants reported that community mobilization can influence the community to participate in healthcare programs in the community. The members who knew and participated in community mobilization were 1.982 times more likely to participate in community rural health care programs than those not mobilized.

After community mobilization, the community members were called for *barazas* (community meetings) and were informed of the rural health facility projects. The study revealed that majority (93.5%, n=359) of the respondents had never been involved in such meetings. The members who attended the community meetings and forums were 6.094 (odd ratio) times more likely to participate in community rural health care programs than those who didn't attend the forums.

Community empowerment plays a critical role in sustainability of community projects. The current study found out that the community empowerment level was low, this was supported by 89.1% (n=342), out of the 342 members who reported not to be empowered, 41 of them had participated in rural health care programs. Among the 42 participants who reported to be empowered, 11 of them participated in rural health services. The results were significantly associated with community participation in rural health care services. Those empowered were 2.505 times more likely to participate in rural health care facility services than those who were not empowered.

On regression analysis, all the factors that were studied under community participation in facility sub-project development cycle in rural health facility services were entered in a stepwise regression model. The Omnibus test of Model Coefficients was significant. The model was fit at p<0.001

From the results it is evident that the significant factors affecting community participation in Kakuyuni Sub-County are: who decides on who to attend the projects, members are chosen depending on who they know in the team choosing participants; being a member of the Sub-county health committee team increases chances of participating in the project and attending NGO forums and stakeholders meetings in the community increases knowledge and skills about community projects, this was seen to increase the probability of participating in future rural health facility community projects.

DISCUSSION

The young adults of an average age of 18-38 years were the majority (73.4%) of the participants. On religion, majority of the participants were Christians with a few Muslims. However, whether a participant was a Christian, or a Muslim did not have an effect on their participation in community rural health facility services. Majority of the participants were women, however, in the current study, the gender of the participant was not a factor in determining their participation in community rural health facility services.

This study found an association between length of stay in the area and community participation. The majority of respondents (n=331, 86.2%) who had lived in Kakuyuni for more than three years, have high chances of being selected to participate in community projects increased with the length of stay in

the community. This implied that the longer you stay in Kakuyuni, the more the other residents know you and the higher the chances of being elected to participate in community rural health services. There was a positive correlation between the length of stay in the area and participation in rural healthcare programs in the area. These results were in line with those found in Tanzania which showed that community members who were raised up in the same community and lived there for long period of time were more likely to participate in community activities than newer residents[1].

The researcher found that, community participation was affected by cultural and religious factors, the attitude of the participants, lack of community empowerment and devolution of services and influence of the local authority. There was no significant association between the age of the respondents, gender of respondents and level of education of the respondent with their participation in community projects.

There was evidence from the study findings that some members had heard about community campaigns, some had participated in the campaigns. There was also evidence of community mobilization in the community towards community participation in rural health facility; the members of the community who participated in the current study reported that there was little done on community mobilization. However, for the members who had heard and participated in community mobilization, there was significant evidence that community mobilization can influence community participation in rural health care facility services. Community mobilization was found to increase the chances of community members to participate in rural health care facility services. These results concur with those of Baciu *et al*., [3] which indicated that to empower the community and involve them in community projects, community mobilization was necessary[3].

The findings of the current study indicated that some members attended community forums and NGO meetings which informed them on the importance of community participation in rural healthcare facility services. The participants who had attended such meetings were 5.094 times more likely to participate in community projects compared to the community members who had never attended such forums. These results are in line with findings of Mitchelle *et al.,* [4] which recommended that community forums should be encouraged in the community to foster knowledge on community participation, who to participate where, when and why they should participate [4,10].

It was found out from the research that health services had been devolved. However, the devolution of the health services had no significant effect on community participation in rural healthcare facility services. The community was not empowered in terms of information about the projects implemented in the community level. Out of all the participants in the current research, 89.1% were not empowered. However, for the few participants who reported to be empowered, they participated in community rural healthcare facility services. This was significantly associated with community participation. The researcher found out that once the community is empowered, community participation increases. The results replicate those reported in a study in Tanzania by Baciu[3].

In general, community participation was found to be significantly affected by community members attending community forums for NGOs, community mobilization efforts and community empowerment were found to be affecting community participation.

CONCLUSION

Community members in Kakuyuni Sub-County were rarely involved in rural health care projects. This was contributed by various factors: being a member of the county committees, who decided on whom to attend the rural health programs and attending NGO meetings in the community were significantly associated with community participation in facility sub-project development cycle in rural health facility services. Community participation was found to be significantly affected by harmonious coexistence of community cultural and religious values and the health facility teachings. Members who attended community forums for NGOs, community mobilization efforts and community empowerment were found to be affecting community participation. The study found out challenges that affect community participation include lack of laws specifically governing implementation of community projects; community members lack of knowledge on community participation; when and where to participate in, lack of community empowerment, poor leadership in the community, lack proper representation and poor infrastructure, poor management systems, corruption and poor communication systems.

The study recommends that the community should be enlightened on community participation, who is to be involved, at what stage, and their role in community projects. This will increase community participation which is currently low. Members choosing who to participate in community projects should employ equity, equality, and transparency. In Kakuyuni Sub-county it depended on who you knew for you to participate in the community projects. Community leaders need to be sensitized on transparency in governance, community empowerment and establishing good communication systems.

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