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Participation of Community Relays (Commuty Health Worker) in the Operation of a Health Area: Case of the Ruashi Health District in the Democratic Republic of Congo

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Abstract

Introduction: A community relay (community health worker) is a person living in the community and serving as a bridge between the health system and the community. It constitutes an essential element in strengthening the health system. The objective is to contribute to improving the well-being of the population with the full participation of community relays in a sustainable and equitable manner through the development and perpetuation of community participation. **Methodology:** We conducted a cross-sectional descriptive case study on the participation of community relays in the operation of a health area, in the Ruashi health district in the Democratic Republic of Congo. This study was carried out during the period from January 1, 2022, to December 31, 2022. **Result**: The majority of community relays were female; The age group between 40 and 49 (28%) was mainly represented; in 52% of cases, the community relays were married couples; the level of complete secondary education represents 36%; Only 4% of community relays had participated in micro-planning; in 48% of cases, the community relays had participated in at least one training and the training theme in which the community relays participated concerned tuberculosis. **Conclusion**: Training as well as the involvement of relays in the activities of the health district guarantee security for improving the state of health of the community. Home visits are so important that it is imperative that community relays be encouraged to carry them out so that the

health system is able to respond effectively to the provision of care.

Subject Areas

Global Health

Keywords

Participation, Community Relay, Health District, Ruashi

1. Introduction

Globally, community participation continues to be recognized as essential to the development, implementation and evaluation of programs and interventions in health and other sectors. In a low- and middle-income country, community participation played a key role in barriers to health service utilization. Community participation through collaborative action is considered essential to program sustainability, especially in low-income settings [1].

The community relay approach aims to promote access to health services, *i.e.,* to make effective the conditions and possibilities of access to health, information, prevention, rights, screening, health structures. It is part of a double movement: not only information coming from structures, but also information from the community to health structures [2].

The approach of community relays takes into account and integrates additional dimensions and parameters of the health field (education, preventive) and those of the environmental field, education and protection, economic and cultural [1].

Community relays must identify the determinants of the health status and health needs of a population and master the different communication techniques [1] [3].

The relays play the role of partners of health services and interface between health services and the community.

In India, the concept of community participation as a development strategy. Community assessment, awareness, involvement, participation and empowerment must be ensured before community participation becomes a self-dynamic process [4].

Burkina Faso has implemented the community participation strategy for several years; management committees have been set up in the front-line health center and must participate in decision-making. A study was carried out to promote the use of health services and massive community support for health service activities. The observation made is that the results expected by the health authorities are slow to be achieved. This article uses factors linked to the socio-cultural context of the health district to analyze the phenomenon of community participation. The study also reveals that communities do not perceive their involvement in the decision-making process of health services as a priority; their main expectations

are towards the availability of quality care at reduced costs [1].

The non-existence of laws recognizing the work of community health workers constitutes a threat to their integration into the health system. In conclusion, community health workers should not be an alternative to providing health care, but an entity in its own right of the national health system [5].

In Benin, community health workers have been in place for over twenty years and are considered an essential part of the health system, acting as a link between the formal health sector and their community. Despite the importance of this role, they are not formal members of the health sector [6].

In Senegal, community health is insufficiently integrated into the health system. As a result, it is apparent in several aspects: the status of community actors is not sufficiently taken into account in the health pyramid. The organization of the health system usually described through the policy and strategy documents of the Ministry of Health and Social Action does not sufficiently place access at the community level [7].

Concretely, the participation of community relays, involvement in activities requires geographical sharing of the area of responsibility, such as health areas. Unfortunately, it must be noted that interventions carried out at community level are not often carried out following a reference framework in most countries. The results of their interventions are undocumented because the monitoring and evaluation system is poorly defined.

In the Ruashi health district, the number of operational relays is not known.

The indicators show that interventions targeting the community level are designed and implemented with little participation from the latter; the weak focus of interventions on communities and families risks compromising the achievement of Universal Health Coverage.

According to the framework of the 2021 National Health Information System, there is an inconsistency of information between the numbers of community relays and the people supervised, poor provision of training, and an absence of a systemic approach to the participation of community relays. Lack of reliable data to calculate indicators of the contributions of community relay tasks.

Community relays face several challenges that limit their functioning and their capacity to optimally participate. The role of community relays does not differ from one country to another. It plays a role as a bridge between the health system and the community. In the context of our study, we wanted to identify the roles that community relays play in the Ruashi health district.

2. Methodology

2.1. Study Environment

This study was carried out in the DRC, Haut Katanga Province, City of Lubumbashi, and more precisely in the Ruashi health district, in the health areas Kalukuluku, Kamasaka, of the mine, and Stella.

2.2. Study Method and Period

We conducted a cross-sectional analytical case study, using mixed methods (quantitative and qualitative) and multiple units of analysis, namely health areas. This study was carried out during the period from January 1, 2022, to December 31, 2022.

2.3. Conduct of the Study and Data Collection

We used the analysis model adopted by the DRC's community participation development strategy, which considers that community participation essentially includes three dimensions, namely: community participation development strategy, analysis of the situation of the community participation, monitoring and evaluation of the development of community participation, organization according to the DRC community participation model.

2.4. Study Population Criteria for Selecting Samples and Sampling

Any Community Relay and president of a community animation unit totaling two years or more and men and women living in the health area for also 2 years.

All community relays and community relay presidents who are less than two years old and households who have not had a total of two years in the health area. We considered two years of experience for community relays to exclude those who had not participated in several training courses organized by the health system.

We selected at random by numbering the different health areas of the health district and we drew a health area at random, and we found the first health area which is number 6 and we added by 6 to find the 4 health areas in our study.

The community relays, the presidents of community animation committees are selected in an exhaustive manner, to determine participation, we will conduct semi-structured interviews in order to evaluate participation and functioning.

Our study population was 167 people due to 50 community relays, 26 presidents of community animation units and 91 households; the exact sample size depends on the saturation of the qualitative interviews.

2.5. Data Collection Methods and Techniques

A quantitative questionnaire concerning the socio-demographic aspect, method of selection and operation, an interview guide, an informed consent form.

2.6. Data Analysis

Once the data was collected, it was analyzed using EPI info 7 software.

2.7. Ethical Consideration and Conflict of Interest

Informed consent was obtained from the respondent before administering the questionnaire and data was collected anonymously to ensure confidentiality.

The conduct of the study respected the ethical principles and rules throughout the course of the investigation, namely, protecting privacy and confidentiality. No

conflicts of interest have been reported.

3. Results

Women are the majority and represent 68% of the population studied and the ratio is 1 man for 2 women. (See Table 1)

Table 1. Distribution of respondents according to the age of community relays.

Age (years)	Frequency	Percentage
<20	1	2
20 - 29	10	20
30 - 39	12	24
40 - 49	14	28
50 - 59	7	14
≥60	6	12
Total	50	100

Mean age: 41.5 ± 13.9 years; Median age 41 years; Minimum 18 years old; maximum 62 years.

In 52% of cases, the community relays are married and only 6% are divorced. (See Table 2)

Table 2. Distribution of community relays according to civil status.

État-civil	**Frequency**	**Percentage**
Married	26	52
Bachelor	12	25
Widower	9	18
Divorce	3	6
Total	**50**	**100**

According to the distribution of educational level, 14% of community relays have not completed primary school, and the majority of community relays know how to read and write for good performance. (See Table 3)

Table 3. Distribution of community relays according to level of education.

Study level	**Frequency**	**Percentage**
University	1	2
Complete secondary	18	36
Incomplete secondary school	14	28
Complete primary	10	20
Incomplete primary	7	14
Total	**50**	**100**

Thirty community relays (60%) are in a liberal profession versus One (1) or 2% who are agents of a company. (See Table 4)

Table 4. Répartition des enquêtes selon la profession.

Profession	Frequency	Percentage
State agent	6	12
Agent of a company	1	2
Liberal	30	60
Unoccupied	13	26
Total	**50**	**100**

Thirty-five (68%) community relays have a seniority of 2 to 5 years. (See Table 5)

Table 5. Seniority as community relays.

Seniority	Frequency	Percentage
2 - 5 years	35	68
6 - 10 years	12	24
11 - 15 years old	1	2
16 - 20 years old	2	4
Total	**50**	**100**

During the week, 36% of relays concentrate twice their time on community services, and 14% are permanent to work with the regular nurses and the community. (See Table 6)

Table 6. According to workload, according to the number of days per week.

Number of days per week	Frequency	Percentage
1	19	38
2	16	36
3	6	12
4	7	14
Total	**50**	**100**

Contributions of community relays in the operation of a health area.

The average of households visited = 25.74 ± 14.10 households, Median = 30 households.

Mode = 15 households. (See Table 7 and Table 8).

Table 7. Number of households visited in the last month by community relays.

Number of households visited in the last month	Frequency	Percentage
≤10	6	12
11 - 20	18	36
21 - 30	11	22
31 - 40	8	16
41 - 50	6	12
>50	1	2
Total	50	100

Table 8. Home visits carried out by me with supporting documentation.

Home visits carried	Frequency	Percentage
0	34	68
1	4	8
2	3	6
3	3	6
4	6	12
Total	**50**	**100**

In 84% of cases, community relays carried out a count in one year. (See Table 9)

Table 9. Counts carried out over the last 12 months.

Enumeration	Frequency	Percentage
Yes	42	84
No	8	16
Total	**50**	**100**

In 42% of cases, community relays carried out a count, in 30% of cases, 2 counts, in 10% of cases, three counts and in 2% of cases, 4 counts. (See Table 10)

Table 10. Number of enumerations carried out during the last 12 months.

Count number	Frequency	Percentage
0	8	16
1	21	42
2	15	30
3	5	10
4	1	2
Total	**50**	**100**

Household identification sheets were the most used versus monitoring sheets for children aged 0-5 years. (See Table 11)

Table 11. Use of data collection tools used by community relays.

Data collection tools	Frequency (N = 50)	Percentage
Monitoring sheet for children aged 0 - 5 years	23	35.4
Household identification form	42	64.6

In 96% of cases, community relays did not participate in micro-planning. The unavailability of community relays would explain this low proportion of participation. (See Table 12)

Table 12. Participation in micro-planning for the year 2022.

Participation in micro-planning	Frequency	Percentage
No	48	96
Yes	2	4
Total	**50**	**100**

Only 8% of community relays use MUAC and 2% have an image during home visits, community relays do not have the equipment for communication and lack of equipment to address acute malnutrition and 90% of community relays do not have no hardware. To deal with the assessment of children aged 0 - 5 years old, there was a community relay that had both tools at the same time. (See Table 13)

Table 13. Equipment (Tool) pusage.

Equipment (Tools)	Frequency	Percentage
MUAC (Image box with key message)	4	8
	1	2
Image box	45	90
Total	**50**	**100**

In 48% of cases, community relays received at least one training. (See Table 14)

Table 14. Training received during the last 12 months and training theme.

Variables	Frequency	Percentage
Number of trainings		
0	20	40
1	24	48
2	1	2
3	5	10
Total	50	100

Continued

Training theme (N = 50)		
Malaria	3	6
TBC	25	50
HIV	5	10
COVID-19	6	12
None theme	20	40

The training themes received were respectively: TBC (50%), COVID-19 (12%) and HIV (10%).

3.1. Resultats

Sociodemographic characteristics of community relays.

Table 1 indicates that the average age of community relays is 41.5 years (±13.9 years) with a minimum age of 18 years and a maximum age of 62 years. These results are different from those found in northern Benin [8].

Women are the majority and represent 68% of the population studied and the ratio is 1 man for 2 women as shown in Figure 1.

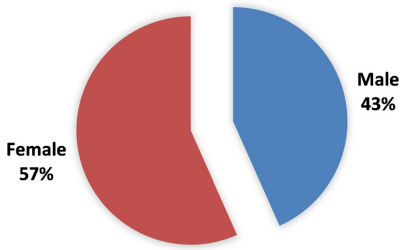

Figure 1. Distribution of respondents by gender.

The bride and groom were mainly represented (52%) (Table 2).

Concerning the level of study, community relays having completed secondary school represent a large proportion (36%) (Table 3).

Concerning the proportion, the majority of community relays had a liberal profession (Table 4). This result could be explained by the high unemployment rate in the Democratic Republic of Congo and also the flexibility offered by this type of occupation where the person is the sole master of time management.

3.2. Seniority as Community Relays

We observed that in 68% of cases, community relays have a seniority of 2 to 5 years (Table 5).

Home visits carried out by me with a supporting document.

The majority of community workers did not make any home visits (68%) (Table

8).

On the Ivory Coast, frequent home visits are carried out by community relays [1].

Table 9. Counts carried out over the last 12 months.

In 84% of cases, community relays carried out a count in the last twelve months preceding our survey (Table 9) and in 42% of cases, a count was carried out (Table 10) in the last 12 months preceding our survey. These results are similar to those found in the east of the Democratic Republic of Congo [9].

3.3. Use of Data Collection Tools Used by Community Relays

The household identification form was the most used tool (64.6%) (Table 11). In Mali, the database of the complete history of pregnancies, the registers of pregnancies, births and child deaths of less than 5 years, monthly supervision reports and relay identification data are the documents used by community relays [10].

3.4. Participation in Micro-Planning for Year 2022

The majority of community relays (96%) did not participate in a single microplanning during the year 2022, as shown in Table 12. The unavailability of community relays would explain this low proportion of participation. These results are contrary to those of a study from the East of the Republic Democratic Congo where community relays participate in micro planning [9].

3.5. Training Received during the Last 12 Months and Training Theme

Concerning training, 48% of community relays had received at least one and tuberculosis was the theme most concerned with training (Table 14). In the Central African Republic, community relays were trained in a post-armed conflict situation on the following themes: case definitions, recognizing symptoms and explaining the mode of transmission of HIV from mother to child; to explain the causes and consequences of gender-based violence and their medical care as well as psychosocial monitoring to refugees and local populations in their community [11]. In the Democratic Republic of Congo, during the epidemic of Ebola virus, community health relays underwent training to identify and report patients meeting the Ebola virus disease alert definitions [12].

4. Conclusions

We conducted a cross-sectional study on the participation of community relays in the operation of a health area in the Ruashi health district in the Democratic Republic of Congo.

We observed the following:

The majority of community relays had seniority of between 2 and 5 years (68%); in 38% of cases, the community relays dedicated one day during the week to serving the community and the number of visits is between 11 and 20 visits in 38% of

cases.

The majority of community relays (68%) did not make a home visit. In 84% of cases, community relays participated in the count.

The low rate of home visits is a defect in the proper functioning of the community health system. The community relay is an essential element of the health system and must identify with the community through frequent home visits.

Conflicts of Interest

The authors declare no conflicts of interest.

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