Scientific Research Publishing

Health, 2023, 15, 667-675
https://www.scirp.org/journal/health
ISSN Online: 1949-5005
ISSN Print: 1949-4998

Factors of Failure of Community Interventions of PMTCT Activities in Haut Katanga in the Democratic Republic of Congo

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How to cite this paper: Ilunga, M.T., Abel Ntambue, M., Kakoma, S.Z.J.B. and Malonga, K.F. (2023) Factors of Failure of Community Interventions of PMTCT Activities in Haut Katanga in the Democratic Republic of Congo. *Health*, **15**, 667-675.
https://doi.org/10.4236/health.2023.156042

Received: January 30, 2023
Accepted: June 27, 2023
Published: June 30, 2023

Abstract

The objective of the study was to identify the failure factors of community interventions in terms of HIV activities in the province of Haut-Katanga during the year 2016. **Materials and Methods:** The study was phenomenological of the factors, carried out in Haut Katanga. All health facilities (FOSAs) having integrated the prevention of transmission of HIV infection from mother to child (PMTCT) were included in the study. The collection was carried out through individual semi-structured interviews with PMTCT focal points, mentor mothers and people living with HIV (PLWHA) cared for in some of these health facilities (FOSAs). The number of participants was determined by the saturation of responses. Nvivo v.11 software was used for the analyses. The data of each woman was handled confidentially. The authorization of the ethics committee of the University of Kinshasa ESP/CE091/2015, the free and written consent, was obtained before collecting the information. **Results:** It was observed the socio-cultural factors of success and failure of the interventions: the social fear generated by contradictory messages in the sensitization of the community; the lack of an obvious strategy for the involvement of the partner; the weak coordination of community care activities between the central office of the health zone; the FOSA and the community worker: low interest in community care evidenced by weak accountability of FOSAs, community and program providers in this regard; that relates to community activities; coordination of care between care units; overload of the staff in charge of activities within the health structure and their low motivation; the low communication time devoted to people living with HIV in the FOSAs. **Conclusion:** The study shows that interventions that can improve the quality

and outcomes of prevention of mother-to-child transmission of HIV (PMTCT) services can be directly linked to the program itself, as well as come from another or the community, which generally remains the weak link in which efforts are even less noticeable, at least as far as PMTCT is concerned. Integrating care data for the mother-child couple improve the continuum of services between the different care units as well as the quality of data management.

Keywords

Success and Failure Factors, Community Interventions, PMTCT

1. Introduction

In 2009, PMTCT activities considerably reduced the risk of mother-to-child transmission [1]. All over the world, there are cases of failure to prevent mother-to-child transmission; these failures are primarily linked to cases of refusal of care [2]. In addition to these, there are several cases that occur when the mother has not had an HIV test, in the event of seroconversion during pregnancy, access to care, early and regular prenatal monitoring [2].

In women monitored and treated during pregnancy, residual cases of transmission persist. These cases are associated with risk factors such as obstetric complications including premature delivery; late management in the 3rd trimester of pregnancy or even at the time of delivery, the existence of clinical manifestations in women, a low CD4 T lymphocyte count or a lack of compliance with a viral load > 10,000 copies/ml not only at delivery, but also during the 3rd trimester [2].

Several recent studies have identified risk factors for vertical transmission of HIV that should be observed when implementing a PMTCT program. These studies divided these factors into 5 categories: 1) maternal factors (e.g. maternal immunological status, antiretroviral treatment), 2) virological factors (e.g. viral load), 3) obstetrical factors (e.g. traumatic childbirth, premature rupture of membranes, chorioamnionitis), 4) fetal factors (e.g. prematurity), and 5) infant factors (e.g. immune status, ART, breastfeeding, nutrition) [2].

Despite the efforts made for several years by organizations of the United Nations system, national governments, and NGOs to ensure the prevention of vertical transmission of HIV, which come up against various difficulties in coverage in terms of screening and follow-up post-screening. In addition, from one site to another, there is a great variation in coverage in terms of screening and follow-up of infected pregnant women. Weaknesses in coverage in terms of screening pregnant women and post-screening follow-up of HIV-positive women would be linked to difficulties [3].

Indeed, the results of HIV transmission prevention programs largely depend on the success of the different phases of care for women offering the test, carry-

ing it out, informing the patient of the result, offering treatment when the result is positive, assuming effective care for HIV-positive women during pregnancy, labor and the postnatal period, which constitute a process chain with intermediate results at various stages of the program [4].

This article intends to illustrate certain difficulties and prospects for success in the fight against the transmission of HIV infection from mother to child, focusing more particularly on the situation in Upper Katanga and South Kivu, where the epidemic takes its most acute form and our study aimed to contribute to the improvement of care during antiretroviral treatment by evaluating the factors of success and failure of community interventions in patients under treatment in the PMTCT framework by community workers.

In this study, we started from the hypothesis that certain organizational factors and control strategies would compromise the success of the activities as well as the achievement of the PMTCT objectives about certain aspects of the 95-95-95 objective, which is an appropriate strategy that will enable the achievement of the objective of zero new HIV infections, which will contribute to the elimination of HIV infection in DR Congo.

2. Methods

2.1. Study Environment and Subject Selection

The study was carried out in the provinces of Haut-Katanga. In the study area, all health facilities (FOSAs) having integrated PMTCT, whatever the option, were included in the study.

2.2. Study and Period

To identify the role of social, cultural, institutional, and organizational factors in the success and failure of community interventions with target audiences, we conducted a phenomenological study of the factors.

The study was carried out during the period from January to March 2016.

2.3. Data Gathering

Data collection was carried out through individual semi-structured interviews with PMTCT focal points, mentor mothers and PLHIVs cared for in some of these FOSAs. The number of women (PLW) and focal points interviewed was determined by the saturation of responses, determined by the successive redundancy of responses in at least 3 PLW interviewed. In each FOSA, the mothers of the children included in the study were invited to participate in an interview on the community interventions carried out within the framework of the PMTCT program.

2.3.1. Inclusion Criteria

Were included in the study:

- Be over 18 years old to participate in the study.

- People living with HIV and mothers of HIV-positive children who agreed to take part in the study.
- The focal points of HIV activities in the health facility who agreed to participate in the study.
- Community workers from different health areas who agreed to participate in the study.

2.3.2. No Inclusion Criteria

- Were not included in the study.
- Were not over 18 years old to participate in the study.
- People living with HIV who did not agree to participate in the study.
- Focal points for HIV-related activities in the health facility who did not agree to participate in the study.
- Community workers in the different health zones who did not agree to participate in the study.

The checklist that guided the interview consisted of three essential themes: 1) description of the B+ approach to PMTCT; 2) the interaction between social actors and support structures and 3) the barriers to scaling up the B+ approach. The B+ approach to PMTCT consists of screening and treating the patient without waiting for paraclinicals tests.

2.4. Data Analysis

The interviews were directly transcribed into French to facilitate their analysis [5]. For the data of the semi-structured interview (the ISS), they were simultaneously translated, during their transcription, from Swahili into French for those of PVV and then re-read. First, we analyzed them to highlight the main categories (factors), then we carried out a thematic analysis based on these factors [5]. Nvivo v.11 software was used to perform the analyses.

The data of each woman was handled confidentially. The authorization of the ethics committee of the University of Kinshasa was obtained before the start of the study ESP/CE091/2015. For the women's interviews, free written consent to participate in the study was obtained before collecting the information.

3. Results

The results of this study are presented in the form of **Tables 1-3** grouped by factors.

4. Discussion

For their part, care providers and community health workers believe that several factors influence the success or failure of community-based activities in the context of PMTCT: socio-cultural, institutional, and organizational factors community work.

Among the socio-cultural factors is the social fear engendered by mixed messages in community sensitization. On the institutional level, they mentioned: the

Table 1. Characteristic related to socio-cultural factors of success and failure of interventions.

Factors	Description
Social fear caused by mixed messages in community outreach	Awareness messages are not coordinated and synchronized according to the aspects of care for the woman, family, and community. Improving knowledge of the community tends to reinforce the stigmatization vis-à-vis those infected or likely to be infected. This stigma is not necessarily based on the profile of the person, but also on the set of actions taken, often linked to the attitude or behavior of people living with HIV. Thus, women cannot adopt caring behaviors that differentiate them from others because they risk being suspected of being HIV carriers. This is the case of mixed breastfeeding after 6 months or taking ARVs at home and administering ARVs to the baby carried out clandestinely in a household where the partner and the family of the man are not cooperative and where the churches continue to believe in the evil origin of disease. "*Given that sensitization was sometimes done from door to door… This led to suspicions by the spouses of two actors* (*sensitizer and PLWHA*) *and raised the conflict…*" HIV focal point
Lack of obvious strategy on partner involvement	Although there are many slogans about the importance of integrating HIV care into the family unit, in practice, there is no proven strategy implemented to involve the partner in the care of the woman. The involvement of the man in the program is a question of the balance of power in the household, between the man and the woman and of the social representation of the disease. Because care programs rely on women for the involvement of their partners, this will only really be carried out when the women have not perceived it as a threat to the life of the couple. "*… The family influences success if it is credible and failure if it discloses the HIV status of their member…*" HIV focal point "*…persuading the woman to announce her HIV status to her partner is difficult for fear of divorce…*" or "*…it can lead to the loss of children…*" HIV focal point

lack of an obvious strategy on the involvement of the partner; hospital-centrism and total medicalization of the care system; poor coordination of community care activities between the BCZS, the FOSA and the community worker; poor coordination of care between the care units: maternity-CPN and CPON; the overload of PMTCT focal points and their low financial motivation as well as the lack of communication time to devote to PLWHs in FOSAs. In the community, the lack of equality in treatment between clinicians and community workers was cited by informants.

The antenatal consultation therefore constitutes a window of opportunity not only to advise pregnant women on the importance of screening, care for the mother and her future baby, but also to consider their vulnerability to the negative consequences of a seropositivity as well as. The second reason for the refusal of the test is related to the paternalism of the male partners who oppose the screening of their wife(s). This results in the need to popularize couple counseling which allows better follow-up of the woman and her future baby [1].

WHO and UNAIDS draw attention to issues of acceptability of HIV-positive people in their communities, stigma, discrimination, and violence from male partners. If routine screening in the context of PMTCT in Benin is justified because of the public health issues generated by HIV transmission, we cannot ignore the socioeconomic conditions characterized by poverty, the scarcity of health care, the uncertain geographic and financial accessibility of health centers and care, gender inequalities and the stigmatization of people with HIV/AIDS [6].

Table 2. Characteristic linked to institutional factors of success and failure of interventions.

Factors	Description
A hospital-centred and fully medicalized care system	Even if the program claims to consider the biopsychosocial dimension of the disease, in practice, it is the biological component of the disease that is concerned. The guidelines and standards are more developed according to the clinical aspect of the care. As discussed below, the psychosocial aspect is managed on a voluntary basis while the investments are made the most on the clinical aspect of the disease. In addition, the fact of centering care on hospital care raises the question of the opportunity cost of visits to FOSAs, knowing that most of the patients involved in the program are poor. "…*insufficient information from Religious Leaders on HIV because the program does not discuss with them*…" "…*sick people often miss transportation to attend appointments*…" HIV focal point "…*most patients are destitute, and the program only covers laboratory tests and medication*…" HIV focal point
Weak coordination of community care/PEC activities between the BCZS, the FOSA and the community worker	Low interest in community care evidenced by low accountability of FOSAs, community and program providers regarding community activities (community management tools, to whom should community workers report community data). Absence of formal relationships allowing the continuum of care between the FOSA and the community: lack of involvement of the PMTCT focal point in community monitoring. "…*we do not have tools for collecting data on community interventions*…" "…*the BCZS does not support service providers and community relays and the latter are understaffed*…" HIV focal point
Coordination of care between care units: maternity-prenatal consultation/CPN and postnatal consultation/CPON	In hospitals, the bipolarization of care between the CPN & PMI Unit and the maternity unit raises the question of the responsibility for monitoring women and children who are on ARVs. The discrepancy of data between these units weakens the establishment of a good database for home monitoring of women and children under treatment. In some health structures, there are community workers attached to the FOSA, called "Mother mentor"; but as presented below, "they are also volunteers and their action is generally limited to women who return to the FOSAs, not those who are lost sight of" HIV focal point
Overload of staff in charge of activities within the health structure and their low motivation	The care of HIV-infected women, particularly in its community action component, is for the health personnel, an additional burden on the usual clinical and administrative tasks in the FOSA. Even if financial incentives are mobilized for these personnel, some do not receive them, or receive them irregularly. Moreover, these incentives are not generally beneficial for these personnel; they are a transportation reimbursement. This assumes that without this transport, the motivation for this extra work is lost. "Being the IT manager and the one who coordinates the PMTCT activities, I work twice, yet I am not even paid but I am only reimbursed for transport while the PMTCT requires a lot to be done…" HIV focal point
Low communication time devoted to PLWHs in FOSAs	Staff responsible for PMTCT activities is overloaded. Already busy with the routine activities of the FOSA, this staff is also responsible for several administrative tasks which do not make them very available to devote more time to patients. It is not enough to do the screening and announce the result to require that the woman adhere to the program, but it is necessary to take time by an individualized work plan, likely to help the woman to confide and to be helped. FOSA staff are not initially trained in such approaches and these advisers are lacking in FOSAs. Insofar as they are available, they can constitute the relay between the personnel of the FOSA as well as those of the community to reinforce the communication with the women and to give them the chance to remain in the program. "…*Explaining the benefits of the program several times and giving the patient confidence is important for women to adhere to the program*…" HIV focal point "…*the first contact can make the patient faithful or not to the activities*…" HIV focal point

Table 3. Characteristic related to community care factors.

Factors	Description
Lack of equality in treatment between clinicians and community workers	As stated above, unequal treatment of staff is also a determining factor in the success or failure of community interventions. The clinical component is financially supported while the community component is not. The risk of volunteering is that caring activities become an afterthought. Community workers thus have the impression of working for the benefit of FOSA agents. "…*We lack the means of transport to reach everyone* (*mentor*)…"; "…*Option B*+, …*I don't know what it is*…" community worker

Studies and the experience of actors show that women have difficulty announcing their status to their spouse, especially during pregnancy, even if access to a treatment that now allows diagnosis makes sharing less difficult only at the beginning of the 2000. In addition, in polygamous households, women fear the conscious or involuntary disclosure of their HIV status to co-wives who may have hostile attitudes towards them [7].

The PMTCT service in Abidjan over a roughly identical period, which first showed the refusal of screening and the reasons that women may have for refusing, then, two years later, that women announce their status sometimes for a long time after childbirth. These studies also showed that people may prefer to share with a third party (mother, friend, brother or sister, friend living with HIV) before sharing their status with their partner. The effectiveness of the national PMTCT strategy relies on the good follow-up of its protocol in the community [8] [9] [10].

Community interventions and health facility interventions are necessary for PMTCT scale-up: "Strong links between communities and health facilities are the foundation of an effective PMTCT program, and full integration of PMTCT services stems in particular from the links that have been developed between them". A second underlying assumption of this report is that neither community engagement nor health facility interventions are sufficient on their own. Community engagement for PMTCT should be accompanied by efforts to improve PMTCT services in health facilities.

Demand created within communities must be linked to adequate, stigma-free and client-centred service delivery. Health facilities should also work with communities to address demand-side barriers and ensure delivery of the full PMTCT service package for every client. Although this report only addresses community engagement, it is understood that eliminating new infections among children and keeping their mothers alive are goals that will require the harmonized deployment of promising practices both at the service level by health facilities and at the level of community engagement [11].

This study carried out from interviews, may contain certain information and selection biases linked to the management of information among women and children in care, but this in no way detracts from the quality of the information provided in this work.

5. Conclusions

The results of this study show that interventions likely to improve the quality and outcomes of PMTCT services can be directly linked to the program itself, just as they can come from another or the community which generally remains the weak link in which efforts are even less noticeable, at least regarding PMTCT. Integrating care data for the mother-child couple improve the continuum of services between the different care units as well as the quality of data management.

The PNLS should harmonize the tools for collecting and managing information and support the FOSAs in setting up reliable databases (registers) of PMTCT activities. Tools such as the adherence checklist can be produced and used by community workers. The attrition of women on antiretrovirals should not only be documented, but its objective and subjective causes (factors) should be studied to put in place appropriate measures for improvement.

Committed leadership at all levels is an important success factor: whether at global, national, regional, community or clinical level, committed leadership will help ensure the success of any PMTCT programme. To achieve the goals set, it will be essential to encourage leadership at the national level and the expression of this leadership in policies, strategies, frameworks, and tools aimed at greater community engagement.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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