



# Barriers Associated with the Effective Implementation of the Universal Test and Treat Strategy of HIV/AIDS in Fako Division of Cameroon: A Qualitative Study

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**Abstract:** *Introduction:* Universal test and treat strategy of HIV/AIDS was introduced by The U.S. Agency for International Development (USAID) in 2014. This was to scale up the attainment of the 90-90-90 target. This strategy only took effect in Cameroon in 2016. Therefore, the aim of this study was to identify barriers that hinder the effective uptake of this approach following two years of implementation. *Materials and methods:* This was a qualitative study where 8 focus group discussions were conducted among community members and 25 in-depth interviews among HIV patients, clinicians and coordinators of HIV/AIDS treatment centers. The study was carried out in 8 randomly selected communities within the 4 health districts of Fako division of Cameroon. Data was collected on demographic characteristics and barriers that hinder the effective implementation of test and treat strategy. The data was analyzed using Nvivo 11. *Results:* The identified barriers were grouped into 2 themes. Health service related barriers and client/community related barriers: Health service related barriers were: Frequent drugs stockout, unavailability of HIV test kits, lack of work space to provide services to client, lack of confidentiality among health workers, limited number of psychosocial counselors and poor attitude of health workers. Client/community related barriers were: Fear of positive results, long waiting time and long distant to the HIV/AIDS treatment centers. *Conclusion:* In order to achieve the 90-90-90- target, the community and hospital related barriers to test and treat strategy need to be addressed by improving the services rendered and also to scale up sensitization on the importance of HIV testing and treatment.

**Keywords:** Barriers, Implementation, Universal Test and Treat, HIV/AIDS, Cameroon

## 1. Introduction

One of the major ways of targeting HIV/AIDS infection is by getting everybody tested and those positive immediately placed on treatment [1]. Research has revealed that only 34% of women and 17% of men had ever been tested for HIV in the general population and have received their results [2]. Global statistics reveal that by the end of 2019, 25.4 million

people were accessing antiretroviral therapy, 38 million were living with HIV, 1.7 million new infections were recorded, 2019, about 690 000 people died from AIDS-related illnesses worldwide, compared to 1.7 million people in 2004 and 1.1 million people in 2010, and 75.7 million people have become infected with HIV since the start of the epidemic [3]. Globally, the HIV committee is working very hard to realize the sustainable goal of Universal Health coverage by ending the AIDS epidemic by 2030 [4]. The 90-90-90 (Fast-Track

Strategy) target set by UNAIDS on world AIDS day was aimed at ending the HIV epidemic by 2030 [5].

However, the uptake of voluntary counseling and testing (VCT) approach and other strategies remain low and have proven ineffective in the attainment of the UNAIDS' 90-90-90 targets by 2020 [6]. This has led to the advent of the Universal test and treat (UTT) ("test and treat all") which is a new strategy to achieve the UNAIDS' 90-90-90 targets [7]. The rationale behind this is to help those infected with HIV find out earlier when treatment works best, it can further decrease the number of babies born with HIV, can reduce stigma associated with HIV testing and can enable those who are infected to take steps to protect the health of their partners. In some facilities in Fako Health Districts, preliminary findings show that only 4 out of 10 persons

leave the health facility with a known HIV status. Therefore, the objective of this study was to identify barriers associated with the effective implementation of the universal test and treat strategy of HIV/AIDS in Fako Division of Cameroon.

## 2. Methodology

### 2.1. Study Design and Setting

The study was carried out in 8 randomly selected communities (Muyenge, Mile 16 Bolifamba, Sandpit, Upper Kostain, Batoke, Idenau, Wututu and Mudeka) and 5 HIV treatment centers (Buea, Tiko, Limbe, Mutengene and Muyuka) within Fako division of Cameroon (Figure 1).

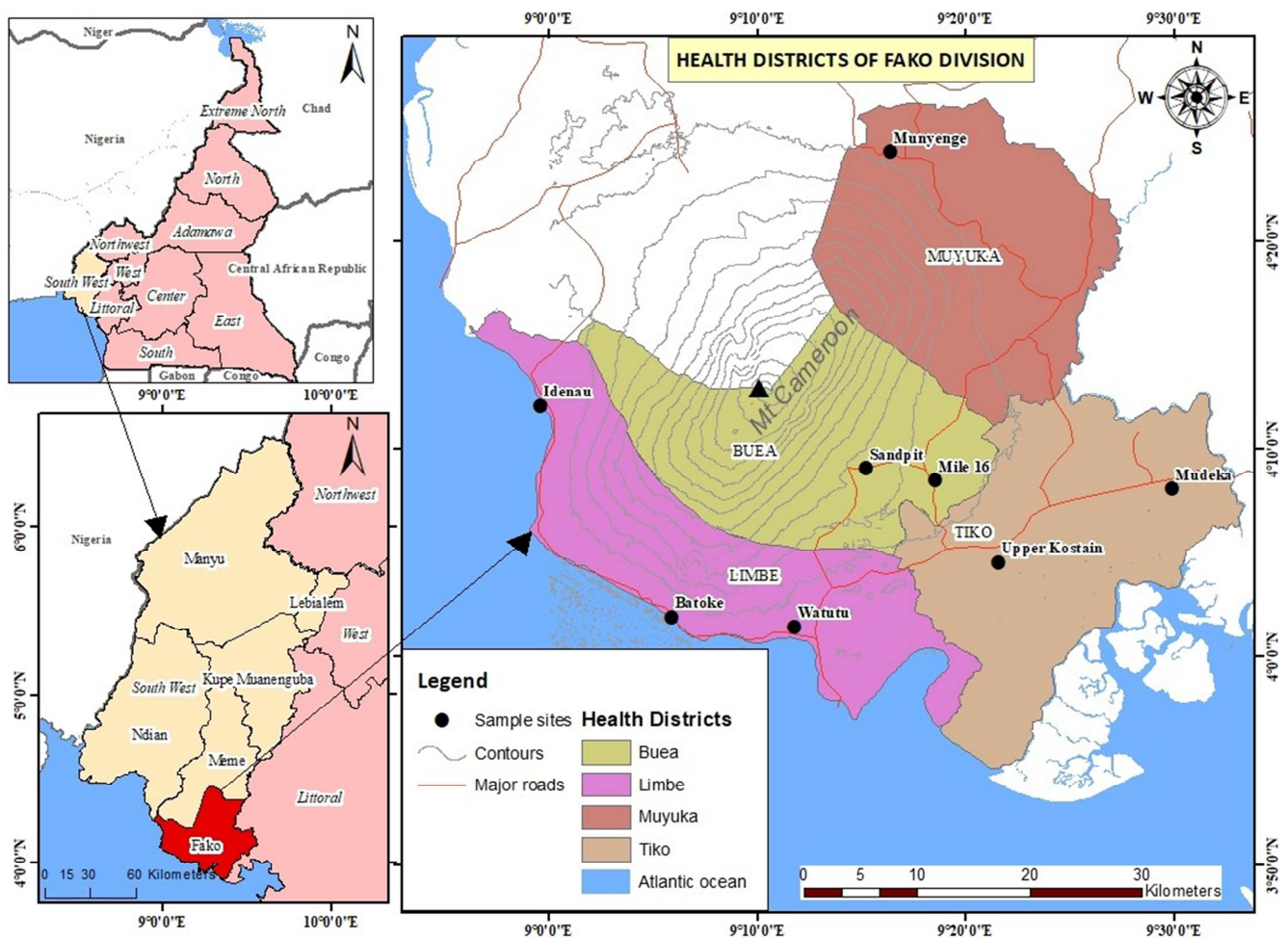


Figure 1. Map of the study area.

### 2.2. Study Population

The focused group discussions targeted community members who were categorized into 4 cohorts (young males, young females, old males, old females) meanwhile the in-depth interviews focused on HIV patients, consulting clinicians and coordinators of HIV treatment

Centers. The data collection instruments were focused group discussion and in-depth interview guides. Purposive (non probabilistic) sampling technique was used to enroll participants into the study based on sample frame guided by the principle of maximum variation. A total of 8 focused group discussions and 25 in-depth interviews were conducted (Tables 1 & 2).

**Table 1.** Number of Focus group discussions conducted within the selected communities, Fako division, 2018.

Data sources	Communities								Total
	Muyenge	Mile 16 Buea	Sanpit	Upper kostain	Modeka	Watutu	Idenau	Batoke	
FGD	Young Females (18-2±)	1	1	1		1		1	4
	Young Males (18-29)			1			1		2
	Old Males (30-49)		1		0				1
	Old Females (30-49)					1			1
Total	1	1	1	1	1	1	1	1	8

**Table 2.** Number of the participants who took part in In-depth Interviews, Fako Division, 2018.

Data collection method	Data source	HIV treatment center					Muyuka Districts hospital	total
		UPEC Buea RH	UPEC Mutengene	UPEC Limbe RH	UPEC District hospital Tiko			
IDIs	HIV patients	4	3	3	3	2		15
	HIV treatment center coordinators	1	1	1	1	1		5
	Consulting clinicians	1	1	1	1	1		5
	Total	6	5	5	5	4		25

### 2.3. Data Collection Procedures

Invitations to participate in the focused group discussion and in-depth interviews were sent out to selected participants two weeks before the chosen date. The focused group discussion sessions were carried out in the community hall and church premises while in-depth interviews were carried out in private rooms in the HIV treatment centers. The focus groups discussions were homogenous for sex and gender. The FGD consisted of a moderator whose prime function was to moderate the discussion, the notetaker who was in charge of taking down notes and the third person whose responsibility was to record the discussion. Participants consent to tape record the FGD and In-depth interview was also sought. With the aid of a FGD guide, the moderator introduced the topic to the group and gave them leeway to express themselves. Their responses gave room for further probes. Participants' responses were written in a field notebook and recorded using a digital recorder. Each FGD and IDI lasted between 45 minutes to 1 hour. All the FGDs and IDIs were tape-recorded using a tape recorder. The records were then transcribed and thematic analysis was done using Nvivo software.

### 2.4. Data Management and Analysis

Data collected during the FGDs and IDIs were digitally recorded and transcribed word verbatim. The field notes were converted into data documents. All transcripts were reviewed by an independent person who was an experienced qualitative researcher. In this process, the independent researcher listened to the recorded voices and compared the voices with the transcripts. The transcribed data was imported into Nvivo 11 for analysis. The data was then analyzed thematically. Thematic data analysis process involves data reduction, data display and data conclusion-drawing/verifying. Line-by-line coding of the various transcripts were done as either free nodes or tree nodes. Queries (analysis in Nvivo) were performed to compare the coding against nodes and attributes to compare within groups and between-groups responses and themes.

### 2.5. Ethical Approval

The study protocol was reviewed and approved by the Institutional Review Board of the Faculty of Health Sciences, University of Buea with reference number (2019/024/UB/SG/IRB/FHS). The study protocol was well explained to all potential participants and those who accepted to take in the study sign the consent form.

## 3. Results

Barriers that hinder the effective implementation of the test and treat strategy were examined in two directions, that is from a community and from the hospital perspective. The following themes emerged.

### 3.1. Client / Community Related Barriers

#### 3.1.1. Fear and Stigma Associated with HIV Testing and Treatment

Majority of the key informants interviewed within the communities reported Fear of HIV positive results as one of the major barriers that prevent people from being tested. They stated that people generally prefer not to know their HIV status and stay in peace even if they are positive. They also explained that those who test positive are always stigmatized and mocked at and because of this, they become psychologically unstable and depressed which therefore quickens their death. Also, majority of the HIV patients interviewed reported that it is very stigmatizing to collect drugs at the center as anybody who sees you going to the HIV treatment center perceives that you are HIV positive. Some even reported that they go to the center in the night to collect their drugs just so that nobody sees them.

*".... You will agree with me here that most people prefer to stay with an unknown status than to go for the test because just knowing that you are HIV positive is enough to kill you..." (Female 50 years, Mile 16 Bolifamba).*

*"...Generally, there is a lot of stigmatizations on HIV patients and this discourages people from doing the test..." (Male, 42 years, upper Kostain).*

### 3.1.2. Low HIV Risk Perception and Trust of Sexual Partner

Findings from the IDI also revealed that some people refuse to do an HIV test because they perceive they have not been at risk or exposed to HIV infection. While some argued that they have never had sex, other stated that they trust their sexual partners and so do not perceive that they might have been exposed. The following expressions are their views.

*"...I have never done an HIV test because I am still a virgin and I do not even have a boyfriend ..."* (Female, 18 years, Idenau).

*"... I have never done an HIV test because I am very faithful to my wife and also, each time she is pregnant, she will do the test in the hospital, so there is no need for me to do the test ..."* (Male, 35 years, Muyenge).

### 3.1.3. Attitude of the Health Workers and Lack of Confidentiality

Another major barrier to the effective implementation of the test and treat strategy is the attitude of the health workers. Majority of the patients interviewed reported that some health workers speak to them very rudely and impolite and this discourages them from coming to pick up their medication. Also, it was mentioned on most of the interviews that some health workers do not keep confidential information as they spread the information to other people. On the other hand, some reported that there are a few very good health workers that do proper counseling of patients, listen to them, and solve their problems. The following are extracts of their expressions:

*".... Most of these health workers providing services to us are very rude and speak to us anyhow, I remember a time I came to collect drugs and the nurse who gave me drugs Insulted me and told me if like I should not take the drugs, it is not her business..."* (HIV patient, 26 years, UPEC, Buea).

*"... Some of these health workers sit in their quarters and tell their friends about peoples' HIV status..."* (HIV patient, 31 years, UPEC Limbe).

*"... There are some health workers that are exceptionally good e g, there is one woman in this center that I take my drugs from who has a very good attitude towards patients, I only go to take my drugs whenever she is around and many patients prefer to take drugs from her than others..."* (HIV patient, 35 years, UPEC Buea).

### 3.1.4. Poor Retention in Care

Testing for HIV is one thing and getting those who are positives to stay on treatment is another. To attain viral suppression and break the chain of transmission, all positive patients must stay on treatment. However, majority of HIV health providers reported retention in care as a huge barrier to the effective implementation of test and treat strategy. They stated that there is an increase in the number of patients in the different cohorts in their various treatment centers due to an increased in testing but the number of the psychosocial workers who are supposed to follow up these patients have not increased. This makes following up difficult as most

patient become defaulters and subsequently become lost to follow up.

*"...It is not easy here with us, we have so many patients who are lost to follow up because there are very few psychosocial workers who are supposed to follow up these patients daily..."* (UPEC coordinator, 45 years, Muyuka).

*"...Most HIV patients are very stubborn and so for them to be able to stay on treatment requires that they be constantly followed up but here it's difficult as there are very few psychosocial workers with huge number of patients making it difficult to follow up all Patients..."* (UPEC coordinator, 39 years, Tiko).

### 3.2. Health Service Related Barriers

#### 3.2.1. Frequent Drug Stock out and Lack of Working Space

Another major challenge that was mentioned by majority of the respondents was the frequent drug stockout and the lack of space within the treatment centers to adequately provide services to the patients. They explained that sometimes a different regimen is given to a patient just because the one in which the patient is currently on is out of stock. One of the consequences of this is that it induces drug resistance. The following are extracts from what they reported:

*"...We frequently have problems with drug availability, like now Isoniazid and Tenolam are finished and because of this we cannot afford to do multi-month dispensation and this really affects patients who live far..."* (Clinician, 37 years, Muyuka).

*"...Due to the test and treat strategy, our number of patients on treatment have increased and we really need more space to provide adequate services to these patients, we just have one hall and all the services are offered there including counselling..."* (UPEC coordinator, 40 years, Idenau).

#### 3.2.2. Long Waiting Time and Distance to the HIV Treatment Center

Though this was not reported in all the treatment centers, long waiting time was also mentioned as a challenge to the effective implementation of test and treat strategy. The respondents reported that patients usually spend a lot of time just waiting to be served and this is due to the large number of patients and fewer health workers, consequently patients are discouraged to come and pick up their medication. Another barrier reported by all the respondents was the long distance between the treatment center and where the patient lives. They stated that most patients do not respect their appointments and some even stop treatment on the basis that the distance to the treatment center is far. The following quotes buttress their views:

*"...I usually feel discouraged each time I have to come for drug refill, and this is because I will absent from work that day as I will have to spend the whole day in the hospital..."* (HIV patient, 33 years, Mutengene).

*"...Yes, another challenge here is that most of our patients live far an because of this we record lots of missed*

*appointment though sometime we assist them with transport fare or even do home dispensation...*" (UPEC coordinator, 45 years, Tiko).

## 4. Discussion

Barriers that hinder the effective implementation of the universal test and treat strategy were looked at from two dimensions. These include barriers related to the hospital and those related to the community members and HIV patients.

Health service barriers to the effective implementation of the test and treat strategy.

### 4.1. Health Service Related Barriers

A series of hospital related barriers were identified as potential barriers to the implementation of the universal test and treat strategy of HIV/AIDS. One of the major barriers identified was frequent drug stock out. Respondents reported that they have been regular drug stock out and sometimes patients come to the facility and go back without drugs. They also indicated sometimes second line drugs are even given to patients who are on first line and this can induce drug resistance. Frequent drug stock out has also been reported in other studies. A study carried out by Zakumumpa *et al* [8] in Uganda reported that the number of clients is increasing but ART supplies are decreasing and because the patients who are on first line treated are being treated with second line medication. Just like regular drug stock out, unavailability of HIV testing Kits have also been a hindrance to the effective implementation of the UTT strategy. Majority of the facilities reported that sometimes, testing is not done due to the unavailability of test kits at the health facilities and these have pushed them to shift from systematic testing to targeted testing. A similar barrier has been reported in a study in Sydney [9]. Also, a few facilities reported lack of working space as a barrier to adequate service provision. They further explained that due to lack of workspace, especially where to do counseling, confidentiality is not maintained. This is the case in some facilities where drugs dispensation, patient counseling, and other services take place just in a single room. Our findings are in accordance with findings reported by kwapong *et al* [10] where they reported lack of space for service provision as a barrier to the uptake of HIV testing and treatment services. Another barrier cited by the respondents was the lack of confidentiality among health workers. They stated that some health workers have failed to keep confidential information of clients as they spread the information to their friends, and this has seriously affected them psychologically and this has in turn affected their ability to stay on treatment. Confidentiality have been reported in many studies as a big challenge to HIV testing and treatment as it induces fear and stigma on the clients if not maintained [10]. The Hallmark of HIV treatment is retention in care i.e., when patients stay on treatment, their viral load continue to be suppressed hence transmission is reduced. Another barrier identified was the limited number of psychosocial counselors. All the health facilities identified

limited number of psychosocial workers as a barrier to the effective implementation of test and treat strategy. This is because the advent of UTT strategy has led to an increase in the number of persons tested and hence increase in positive cases. These cases need psychosocial support to be able to stay on treatment. Unfortunately, most health facilities and treatment centers have not witnessed an increase in the number of psychosocial counselors who play an important role in the effective implementation of the UTT strategy and enable patients stay on treatment.

### 4.2. Clients / Community Related Barriers to the Effective Implementation of the Test and Treat Strategy

With regards to client related barriers, respondents reported poor attitude of health workers as a barrier to these services. They explained that some health workers are very rude and speak to the patients in an impolite manner and this negatively affects patients and hence treatment. Some HIV patients reported that they have their specific health workers that they prefer to serve them each time they are coming for their drug refill and other services. Other studies have reported similar findings [11-13]. Majority of the respondents also cited fear of positive results as another barrier to HIV testing. Some said they prefer not to know their HIV status. Some participants reported that some people do not want to test for HIV because they perceive that they have not been at risk or exposed while others reported they trust their sexual partners and do not find any reasons for testing. Similar findings were reported in studies conducted in Cameroon and Nigeria [14, 15] Long waiting time was another barrier that was recurrent across most treatment centers. Participants indicated that long waiting time has negatively affected the implementation of the test and treat strategy as patients who come for testing and those who come for treatment spend long hours waiting to be provided services. This is partly explained by the low number of staff that provide these services and also the poor attitude of some of these staff towards patients. These finding align with those reported in South Africa [10, 15]. Long distance to the treatment center was also cited as a barrier to HIV testing and treatment. Although, participants explained that sometimes their transport fare to the treatment centers is reimbursed, this is not done all the times and sometimes they do not even have the transport fare to go to the center before it is even reimbursed. In a similar study Conducted in Zimbabwe, distance to the treatment center was also cited as a barrier to HIV testing and treatment [16]. This has also been reported by Tafuma *et al* [16] in Zimbabwe and Mohlabane *et al* [17] in South Africa reported similar findings.

## 5. Conclusion

Conclusively, identified barriers that hinder the effective uptake of the test and treat strategy of HIV/AIDS were classified as health service and client/community related barriers. Health service barriers were: frequent drugs stockout, unavailability of HIV test kits, lack of work space

to provide services to client, lack of confidentiality among health workers, limited number of psychosocial counselors and poor attitude of health workers. Client/community related barriers were: Fear of positive results, long waiting time and long distant to the treatment centers. Therefore, addressing these challenges both from the communities and treatment centers perspective will play an important role in the attainment of the 90-90-90 target.

## Authors' Contributions

*Conceptualization:* Kah Emmanuel Nji, Nsgaha Dickson Shey, Vincent Verla Siysi, Ngowe Ngowe Marcelin

*Methodology:* Kah Emmanuel Nji, Nsgaha Dickson Shey

*Data collection and analysis:* Kah Emmanuel Nji

*Supervision:* Nsgaha Dickson Shey, Vincent Verla Siysi, Ngowe Ngowe Marcelin

*Resources:* Kah Emmanuel Nji

*Manuscript drafting:* Kah Emmanuel Nji

*Review of manuscript:* Nsgaha Dickson Shey, Vincent Verla Siysi, Ngowe Ngowe Marcelin

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