

Assessing the effectiveness of the Circle of Hope community health post model in improving access to ART services: A comparative study with the traditional health facilities in Lusaka District - Zambia

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Abstract: *The study aimed to assess the effectiveness of the Circle of Hope Community Health Post model in improving access to art services in Zambia. The study was conducted in Lusaka District, the capital city of Zambia, using a mixed methods approach involving quantitative and qualitative methods. The results showed that traditional health facilities received more clients than community posts, with traditional health facilities having the confidence of people in terms of confidentiality and privacy. The study found that 90% of those who had not been to the community posts would still not go there. Waiting time was the same at both institutions, as counseling was mandatory and could not be restricted to time. Distance favoring community posts was found to be 50% of respondents who said they were nearer. The study found that community posts had enough resources to meet the current clientele but needed more to meet the anticipated increase of clients. The majority of the community went to traditional health facilities because they were used to going there even before the community posts were opened. Although community posts had more advantages than traditional health facilities, they did not win the confidence of people and publication and advertising were not done thoroughly.*

Key Words: *HIV; community health post; circle of hope; ART services; Differentiated Service Delivery (DSD)*

1. INTRODUCTION :

The high HIV/AIDS prevalence in Sub-Saharan Africa has severely constrained public health institutions, resulting in inadequate facilities, inadequate supplies, overcrowding, and a shortage of health workers. Zambia, one of the most affected countries, experienced a 1.3 percent drop in prevalence rates between 2002 and 2007. (Gathumbi, 2007). To improve vulnerable populations, interventions targeting multi-level influences and decentralization service delivery strategies, such as community posts, are needed. This will help close programmatic gaps in diagnosis, treatment, and adherence, ultimately driving the UNAIDS agenda to target 95-95-95 by 2030. Circle of Hope, a local partner, is leading the way in implementing decentralized service delivery systems to bring services closer to communities. Circle of Hope (CoH) is a non-governmental organization that became operational on the 1st September 2005 established by North mead assemblies of God church as a direct response to the support for people living with HIV and AIDS (PLHIV) within the church fraternity. On commencement COH realized the need to care and provide for the whole family and adopted a family centred approach (Mutumba, et al., 2021).

Circle of Hope uses differentiated service delivery models through community posts, aiming to improve HIV case finding efficiency, linkage to treatment, and retention in care. These posts are accessible sites operated by local staff trained in customer care and core values. They provide HIV testing, routine monitoring, care, and referrals to certified parent facilities. The three-pronged response approach focuses on offering decentralized services closer to lower socio-economic status and improving access to health services, particularly for men and target populations less likely to access facilities.

2. LITERATURE REVIEW :

Sub-Saharan Africa faces a high HIV burden and limited domestic health resources, leading to the adoption of alternative treatment delivery models. These models target stable ART patients who require less medical oversight (Massanella, et al., 2018). The region, particularly Zambia, is under pressure to meet international targets, such as the UNAIDS 90-90-90 and 95-95-95 goals. To address challenges such as shortages of health workers and infrastructure strain, DSD models have been developed to improve patient outcomes and health system efficiencies. These patient-centered approaches aim to decentralize health services and make care more accessible, potentially increasing clinic efficiency and patient retention. DSD programs often move services away from overburdened facilities and into community-based locations, reducing provider interactions and improving access (Kwena, et al., 2021).

Differentiated Service Delivery (DSD) is a client-centered approach that simplifies and adapts HIV services across the cascade, serving the needs of people living with HIV better and reducing unnecessary burdens on the health system (Ducombe, 2019). DSD consists of basic elements such as appointment spacing, out-of-facility care, and task shifting to non-clinician cadres. In Malawi, the Community ART Group (CAG) model was implemented to determine the effectiveness of the community post model. However, there are limitations, such as client confidentiality, stigmatization, and interpersonal conflicts Pellecchia et al (2017). In Zambia, there are nine main DSD models for ART, including facilities-based models like Fast-Track, Multi-Month Scripting, and Urban/Rural Adherence Groups. Additionally, Zambia offers a specialty adherence group model for adolescents and young adults called the Scholars (Adolescent) Mode (Kwena, et al., 2021).

The study examines Circle of Hope's community post model, which uses high-impact strategies to identify cases, link people to treatment, sustain treatment, and help maintain viral suppression. CPs offer same-day ART initiation, support new PLHIV patients, and follow up with community health workers. However, evidence on the effectiveness of community-implemented DSD models is limited.

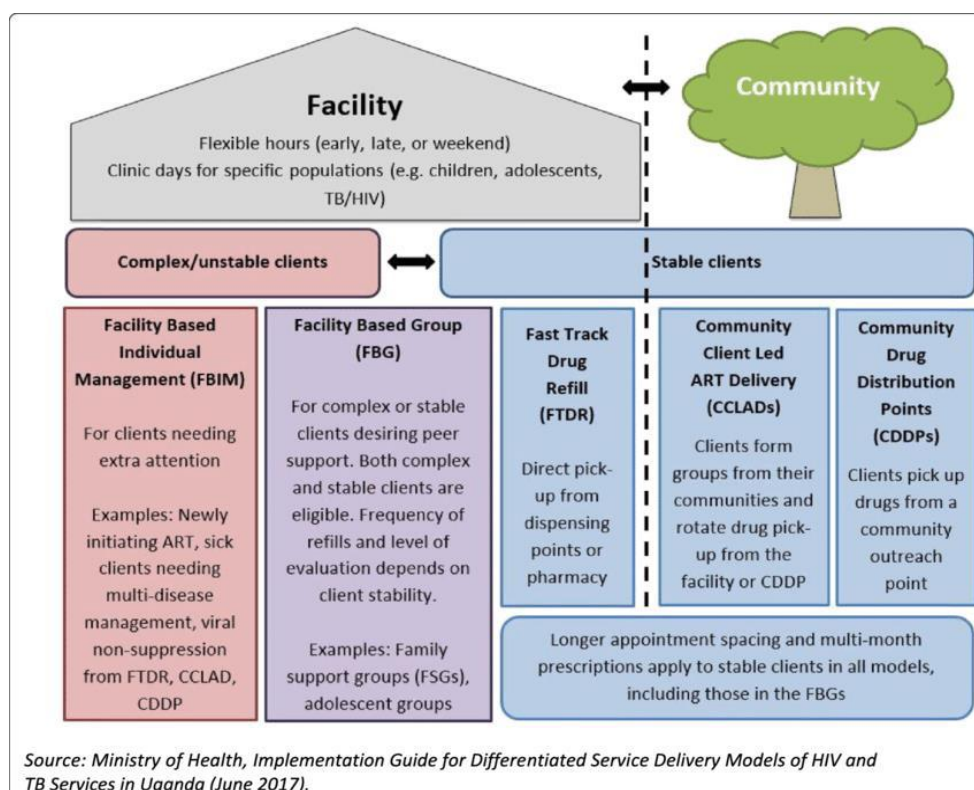


Figure 1: Conceptual framework

3. MATERIALS AND METHODS :

This mixed-methods study focused on the HIV/AIDS pandemic in Lusaka district, targeting adults who had access to traditional health facilities and community posts. The study focused on Chaisa, Kaunda Square, and Chelstone Compounds compound, each with its own unique characteristics. The participants were HIV positive or negative, and

those who moved into the areas at least three months before data collection were excluded. The study aimed to understand the experiences of adults in these areas and their experiences with the pandemic. The qualitative study used purposive sampling to recruit participants, including key informants, community health workers, team leaders, and data associates. The snowball sampling technique was used for PLHIV, with interviews conducted at community posts. Six focus group discussions were conducted, with eight to twelve participants in each group. Six in-depth interviews were conducted per site, and six key informant interviews were conducted with in-charges at posts and facilities.

The study employed a multistage random sampling technique, including clustered, stratified, and simple sampling. Clustered sampling represented three sites, while stratified sampling addressed demographics like socioeconomic status, gender, age, and education. A sample size of 420 respondents, aged 18 and above, was selected.

The qualitative data was collected through in-depth interviews with PLHIV and key informant interviews with community health workers and team leaders. Observations and focus group discussions were used to gather general views on the service providers. Key issues included HIV/AIDS prevention, medicine availability, patient-healthcare provider interactions, routine follow-up of patients, health education, and counseling sessions. The interviews were conducted in Nyanja and English, focusing on the community post's facilities and staffing. The quantitative data was collected using an interviewer-administered questionnaire. This study analyzed qualitative and quantitative data using framework analysis and descriptive methods, using SPSS for statistical analysis.

4. ANALYSIS AND RESULTS:

4.1 Overview

The study found that 50.5% of respondents visited traditional health facilities and 49.5% visited community posts within the past 10 months. However, the difference was small, with 100% of respondents feeling comfortable seeking medical assistance. Both qualitative and quantitative data were analyzed independently using thematic and statistical methods.

4.2 Social Demographic Characteristics of Respondents

Table 1: Table showing demographic characteristics of respondents

Variable	Profile	Number	%
Age	10 to 16	40	9.5
	17 to 60	370	88.1
	Above 60	10	2.4
Sex	Male	192	45.7
	Female	228	54.3
Years in Area	Less than a year	15	3.6
	1 to 3 years	167	39.8
	More than 3 years	238	56.7
HIV status	Negative	216	51.4
	Positive	204	48.6
Heard about community posts	Yes	397	94.5
	No	0	0
	Little knowledge	23	5.5
Source of income	Salaried Job	38	9
	Business	93	22.1
	Other	289	68.8
Education level	Postgraduate	2	0.5
	University	133	31.7
	College	128	30.5
	Secondary school	141	33.6
	Primary school	16	3.8

The study had 54.3% female participants, with 56.7% living in residential areas over three years. 94.5% had sufficient knowledge about community health post, while 5.5% had little information. All participants had heard about the intervention.

4.3 People Going for ART in the Past 10 Months

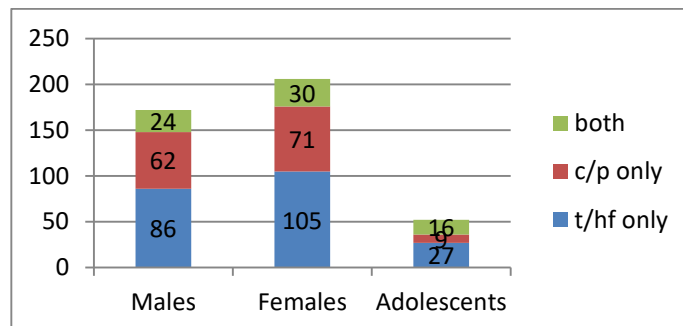


Figure 2: Showing people going for ART

Only a few adults have visited both traditional health facilities and community posts in the past 10 months. Adolescents have a 5:3 ratio of attending both facilities, while adults visit only one. Adolescents prefer traditional health facilities.

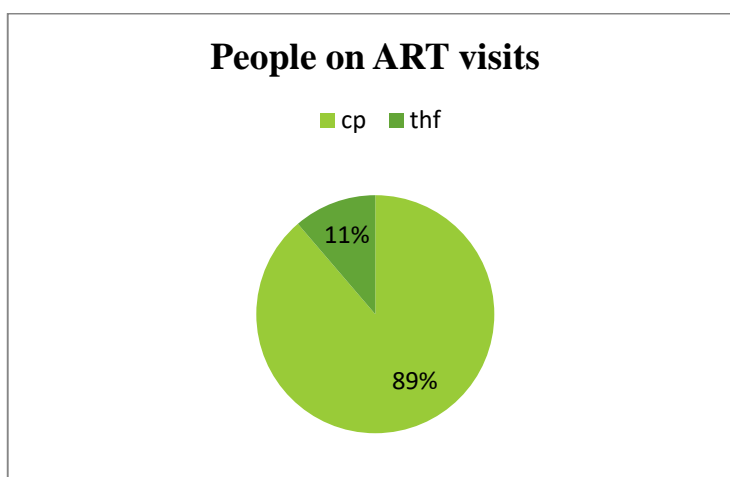


Figure 3: Showing people tested and put on ART treatment and the retention rate of the ART patients recruited in the community posts as compared to traditional health facilities.

The pie chart shows 89% of HIV patients use CPs, compared to 11% using traditional health facilities. Some participants associate health facilities with other medical services, such as ART, and choose to test for HIV with others with other health issues.

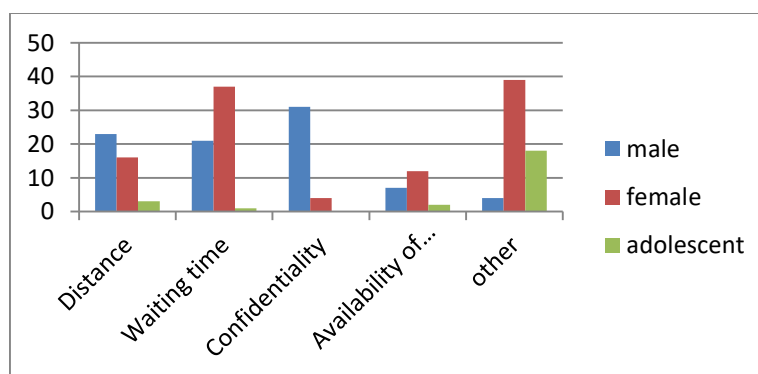


Figure 4: Reasons choice of facilities

50% of respondents prefer community posts for distance, as CPs are centrally located for HIV/AIDS-related matters, while clinics and hospitals serve a larger population. The study found that counselling sessions are available at both community posts and traditional health facilities, with the duration varying depending on the client. Community posts have a smaller target population, allowing for faster service delivery, while traditional health facilities have longer queues due to referrals. 50% of respondents preferred community posts due to their central location, while clinics and hospitals serve a larger population beyond the community.

4.4 Would Use the Community Post

The study reveals that less than 10% of participants willingly used community post for ART services, and 52% believed there was insufficient trained staff to manage HIV cases. This lack of confidence and resources led participants to prefer traditional health facilities. The majority of participants were not comfortable using community post facilities.

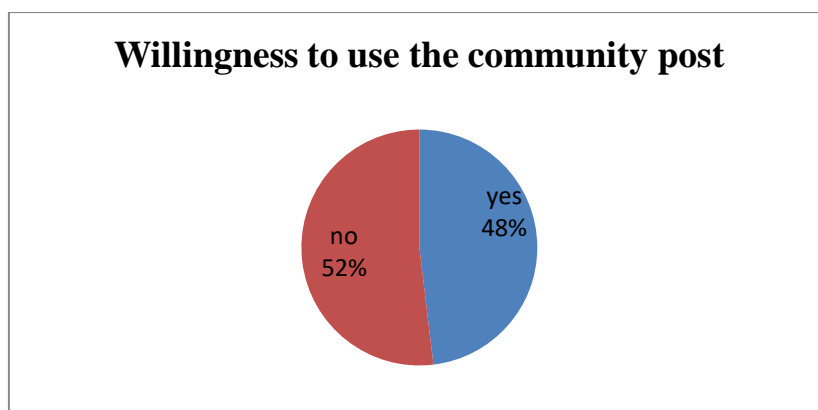


Figure 5: Willing to use community posts

Staff at community posts are trained as much as those at traditional health posts, but some residents may not be comfortable using them.

5 DISCUSSION :

The comparison between institutions lies on the acceptability and adoption of both institutions. When one institution has been in existence for a long time and another being a new intervention, adoption is key (Wilkinson and Marmot, 2003). This study sought to compare the traditional health facilities which have always been there and generally accepted by people with community posts which is a new intervention. The results revealed that the adopted and accepted traditional health facilities were favored more by the population who seemed skeptical about community posts. These results are in conflict with a study done in India which favored innovations more than the current situation (Jribi et al., 2020). However, they are in harmony with a study in Kenya where the people did not easily accept new interventions (Syme, 2004).

The people who seek medical attention are social beings who naturally have to interact with other human beings. Any place where there are a lot of people who have gathered become an opportunity for them to make new friends and get to know one another. This could be a school or even a health center (Xiang et al., 2020). The nature of the community posts favors social interaction among people living with HIV. As shown in the study people were afraid of mingling for fear of being socially segregated by other people due to their HIV status. This turned the environment around the community posts to be tense initially. A study shows that during the people living with HIV disclose their statuses to people they are comfortable with (Arora and Grey, 2020). Contrary to this, this study shows that the people at the community posts were open to discuss their statuses but felt those from the traditional health facility were still uneasy around other people.

Culture was also affected by the introduction of community posts which also affected how people frequented the traditional health posts. Culturally, sex related discussions have been among peers and when elders are passing values to the younger generation and socialization (Sinha et al., 2020). When people are gathered and are interacting they constantly talk about the ways of life and counselling young ones. With the community posts, people living with HIV were encouraged to interact as a means of support. Thus, it positively impacted socialization by people seeking medical

assistance at the community posts when compared to the traditional health facility. Studies show that socialization is an integral part of the social system and hence this initiative was welcome on social grounds (Nieder krotenthaler et al., 2020). People seeking medical assistance at the traditional health facility to were usually isolated due to the nature of place and even more difficult for the PLWHIV community as they would feel judged.

In terms of frequency to the community posts, this study shows that there was an increase in visits among the elderly population and the opposite for the adolescents when compared to the traditional health posts where the opposite was the case. This difference, according to the study was based on maturity and fear. This is in line with a study that revealed that the young population is more secretive than the older population who are only concerned with continued living and supporting their families (Caroll, et al., 2020). We can see from the study that young population frequented the traditional health facilities to dispel suspicions on their HIV status. Testing positive to the HIV virus would mean they would be segregated by peers and other members of the community and even family. To avoid being suspected to be living with the virus, they avoided the community posts in favor of the traditional health facilities. This was evident in the study and was the case in a study in Ethiopia (Moore, et al., 2020).

Medical help can be acquired from different places. Actually, the government had taken a multi-sectorial approach which included the community, non-governmental organizations, privates and even churches. This entails that people had a lot of options to seek medical assistance depending on their preferences and what they could afford. However, contrary to that, the study has shown that people still depended on the traditional health facilities for medical assistance more than the community posts. This may be attributed to that it is not easy for people to change from the health care system they trust to another. Despite the merits that came with the community posts, they still trusted the traditional health facilities to provide the best health service as compared to other systems. When people trust the system, they would continue going there even when they feel it is less safe than before. However, it is worth noting that when they give up on it, they would not come back to it. Therefore, it is important that the standard of the traditional health facilities is maintained or better still, improved (Tasnim et al., 2020).

5.1 Implications on Research and Practice

This study aimed to compare two service providers and understand their complementing roles in low and middle-income countries. A questionnaire was used to test the questionnaire, based on results and literature. The study aimed to understand the acceptability and adoption of community posts as ART service providers, using Rogers' theories of change. The adoption of community posts was expected to lead to permanent behavior change, as demonstrated by Maritim et al. (2019). An exploratory study could gather more information on people's views on the services provided by the two service providers. Understanding people's experiences and providing generalized and appropriate interventions would help ensure everyone feels free to utilize community posts.

5.2 Observations (Policy and Public Health)

The successful implementation and utilization of community posts require a multi-sectorial approach that involves traditional and opposition political party leaders. The political atmosphere can affect the uptake and acceptance of interventions, leading to distrust in government health centers. Local leaders should work closely with government and partnering organizations to ensure transparency and acceptance. Government institutions should also take a leading role in ensuring collaboration with the community. Unsatisfied with government facilities and private facilities can lead to suspicion of new innovations, causing delays in change and poor patient-provider relationships. Social influences also impact the acceptability of interventions. Health education is crucial for understanding the health benefits of community posts and reducing anxiety among community members. Public health specialists should educate the public on the importance and safety of community posts and encourage them not to fear them. Most people visit traditional health facilities more frequently than community posts, despite their advantages. Health education would help people know when to visit clinics and community posts.

5.3 Strengths and weaknesses

The COVID-19 pandemic impacted various sectors, including health, and health centers faced the challenge of dealing with the HIV pandemic simultaneously. The study did not examine how people with HIV impacted their choice of facility, as guidelines were in effect while seeking medical assistance.

The study's weakness lies in using phone interviews with health workers after work, resulting in lack of non-verbal communication and difficulty in probing. Key informants should be interviewed at work, not at home.

6 RECOMMENDATIONS:

- Conduct studies using Rodgers' theories of change to understand the way the initiative can be used and get adopted by the people.
- There should be community sensitization and mobilization efforts to provide more information to community members to improve the levels of knowledge in the following areas: - Nature of the community posts, services they provide, location and values.
- Health workers from the traditional health facilities should be advised to psychologically assure the public that the community post is there to help them as much as the traditional health facilities though its purpose is not to provide all clinical services but limited to HIV/AIDS and a few services.

6.1 CP model and Staffing Sustainability

The researcher attempted to gather some information from the interaction and here by provides some suggestions and recommendations for the sustainability of the model though not as the lasting solution which remains as another topic for further studies by other researchers.

- The current strategy of attaching the Community post an existing mother facility plays a key role in the sustainability of the community post in that, should there by funding challenges form outside donors, the mother facility will continue to support the operations of the CP by;
 - a) Seconding key staff (Clinician) and others to provide clinical work in the CP, this can be on rotational basis.
 - b) Continuous supply of commodities inkling drugs and essential equipment's (scales and registers)
 - c) Trainings and capacity building of the CP by the mother facility personnel
- The government through the MOH should increase funding to the ministry with a considerable amount for the running of the CPs including staffing and logistics.
- The government through the MOH should consider strengthening the community leadership to own and support the CPs through a public and Private partnership (PPP) modality. Where key business such as banks and insurance companies can adopt and support these CPs over a long period of time. This could an ownership approach where theses business entities own the clinics like some mining companies have done such as the MOPANI mine for the Kabwe mine hospital and Ronald Ross Hospital in Mfulira. Therefore, the awareness of the existence of the CP must be emphasized at the mother facility for all staff and leadership to know and support the CP fully.

7 CONCLUSION :

The effectiveness of community post model in improving access to antiretroviral therapy (ART) among community members in Lusaka district was the subject of this study. However, the response to this initiative has not been as anticipated for people would rather go to the traditional health facility than the community post. The study met its objectives by bringing out the deficiencies that community posts should work on in order to meet their objectives. Being a comparative study, it brought out the differences in terms of quality and preferences between the two forms of health providers. The majority went to the traditional health facility as a norm and other services as they felt they had been doing before the community posts were opened. For the community posts, they had more advantages than the traditional health facilities but did not win the confidence of the people. People would feel the need to go to the traditional health facilities for help and felt would receive more other services than the community where they questioned the availability of other services apart from HIV/AIDS services.

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