

Barriers and Facilitating Factors to HIV Treatment Among Men in a High-HIV-Burdened District in KwaZulu-Natal, South Africa: A Qualitative Study

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Mbuzeleni Hlongwa^{1,2} , Ngcwalisa Amanda Jama^{1,3},
Vuyelwa Mehlomakulu¹, Desiree Pass¹, Wisdom Basera^{1,4},
and Edward Nicol^{1,5}

Abstract

Despite enormous increases in the proportion of people living with HIV accessing treatment in sub-Saharan Africa, major gender disparities persist, with men experiencing lower rates of testing, linkage to treatment, and retention in care. In this study, we investigated the barriers and facilitating factors to HIV treatment among men in uThukela, a high-HIV-burdened district in KwaZulu-Natal province, South Africa. We conducted a qualitative study including nine Black African male participants who were recruited from 18 health care facilities in uThukela District, KwaZulu-Natal province. In-depth interviews were conducted with participants who linked to care and those who did not link to care at 3-month post HIV diagnosis. We used Atlas.ti for thematic analysis. Data were coded and linked to broader themes emerging across interviews. The median age was 40 years (interquartile range [IQR]: 31–41). This study identified the following key themes which emerged as barriers to HIV treatment among men in uThukela District: lack of emotional readiness, perceived medication side effects, fear of treatment non-adherence, perceived stigma and confidentiality concerns, and poor socioeconomic factors. We identified the following enabling factors to HIV treatment among men: fear of HIV progressing, acceptance of status, disclosure, support from family and friends, positive testing experience, and accessibility of antiretroviral treatment. This study revealed barriers and enabling factors to HIV treatment among men. These factors are important to inform the design of targeted intervention strategies aimed at improving linkage and retention to HIV treatment among men.

Keywords

men, barriers, facilitating factors, HIV treatment, KwaZulu-Natal

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Introduction

Despite enormous increases in the proportion of people living with HIV (PLHIV) accessing treatment in sub-Saharan Africa, major gender disparities persist (UNAIDS, 2015a). Men are less likely than women to access HIV care (Staveteig et al., 2013). Across sub-Saharan Africa, the rates at which men are tested, linked, and retained in HIV services are lower than women (UNAIDS, 2017). In South Africa, 78% of men living with HIV know their HIV status, compared with 89% of women (Human Sciences Research Council [HSRC],

2017). Only 67% of men diagnosed with HIV are on anti-retroviral treatment (ART), compared with 72% of women diagnosed with HIV (HSRC, 2017). Among men who are diagnosed with HIV and linked to HIV treatment, many are likely to experience high treatment interruptions compared with women (Kaplan et al., 2017). Although ART is widely available and accessible in South Africa, several barriers exist to deter men from accessing these services, including dominant masculine norms, the design of health services, stigma associated with HIV, concerns about confidentiality, long waiting times, inconvenient clinic operating hours, and time and money spent



traveling to seek care (Fleming et al., 2016; Hlongwa et al., 2020; Leblanc & Andes, 2015; Sharma et al., 2017).

The scale-up of the HIV testing and treatment cascade has largely benefited women more than men. Lower rates of HIV testing, poor linkage, and retention on ART may contribute to growing female–male disparity in adult life expectancy (UNAIDS, 2017). Men are diagnosed and initiated on ART at an advanced stage of HIV compared with women (Druyts et al., 2013; Naidoo et al., 2017). Men experience increased virological failure due to high treatment interruptions, resulting in high HIV-related mortality rates on ART among men compared with women (Barnighausen et al., 2014; Naidoo et al., 2017; Tsai & Siedner, 2015). Data report that women are 27% less likely to die from HIV-related illnesses compared with men, while more than half of all HIV-related deaths among men occur in men who have never been initiated on ART (Bor et al., 2015; UNAIDS, 2017). This suggests an urgent need for understanding barriers and enablers to HIV treatment among men in resource-limited settings to improve health outcomes, curb HIV transmission rates, and achieve epidemic control including the UNAIDS 95-95-95 targets (95% of all PLHIV should be diagnosed, 95% of people diagnosed with HIV should be started on ART, and 95% of people started on ART should have a suppressed viral load; UNAIDS, 2015b).

Linkage to and retention in care among HIV-diagnosed men remain one of the top priorities in the continuum of HIV treatment cascade in South Africa. Linkage and uninterrupted retention in HIV treatment are critical for achieving viral load suppression among populations, and ultimately decreasing HIV transmission (Colasanti et al., 2016). In this study, we investigated the barriers and facilitating factors to HIV treatment among men in a high-HIV-burden district in KwaZulu-Natal province, South Africa.

Method

Study Setting

This study was conducted in the uThukela District Municipality (DM) in KwaZulu-Natal (Figure 1). The population of uThukela district is predominantly poor,

rural, and utilizing public health services (Statistics South Africa, 2020). uThukela DM has a high HIV prevalence, at 22% among men aged 15 to 49 years (HIV Data, 2020). The population of uThukela DM is required to travel long distances to access basic health care services (Statistics South Africa, 2020).

Study Design

A qualitative study design approach was followed to understand the perceptions and experiences of participants on enablers and barriers to accessing HIV treatment. This qualitative study was embedded within a larger study (Nicol et al., 2021).

Population and Recruitment

The selection of participants for this qualitative study was based on the 4-month follow-up primary outcomes data of the main linkage to care study data (Nicol et al., 2021)—whether HIV-positive participants had linked to care or not. A maximum variation purposive sampling technique was applied to include a varied representation of participants in terms of age, marital status, employment status, geographic area, and location of health facilities utilized. The maximum variation approach enabled us to obtain wide-ranging responses from the study participants.

Data Collection and Management

Individual interviews with the participants were conducted at their households and/or clinics by trained fieldworkers. Interviews were conducted from October 2018 to February 2019 based on participants' availability in the place of their preference to accommodate those who might not have disclosed their HIV-positive status to those with whom they share a home with. On the interview day, written informed consent was obtained from all participants. Interviews and life story narrations were mostly conducted in IsiZulu (local language) and audio recorded. Each interview lasted between 20 and 105 min. An ongoing review of interviews, through listening to the audio, was conducted along with the debriefing among interviewers. This assisted with

¹Burden of Disease Research Unit, South African Medical Research Council, Cape Town, South Africa

²School of Nursing and Public Health Medicine, University of KwaZulu-Natal, Durban, South Africa

³School of Public Health, University of the Western Cape, Bellville, South Africa

⁴School of Public Health and Family Medicine, University of Cape Town, Cape Town, South Africa

⁵Division of Health Systems and Public Health, Stellenbosch University, Cape Town, South Africa

Corresponding Author:

Mbuzeleni Hlongwa, Burden of Disease Research Unit, South African Medical Research Council, P.O. Box 19070, Tygerberg, Cape Town 7505, South Africa.

Email: hlongwa.mbu@gmail.com

maintaining the quality of interviews and amendments to the tools and interview procedure. All participant interviews were transcribed verbatim and translated into English. Quality checks were performed on all transcribed interviews by a qualitative researcher who is competent in English and IsiZulu languages.

Data Analysis

The analysis team, which comprised of three members, independently read through all the transcripts to gain a general understanding of the content and scope. Thereafter, they met to discuss initially emerging themes and to develop a structured coding framework guided by the main questions of interest. Coded information was linked to broader themes emerging across interviews. Data from the interviews were coded independently using Atlas.ti version 8 software. Comparative analysis between three skilled qualitative researchers was performed to ensure analysis accuracy. The analysis process was informed by the interview questions, literature, and the inductive approach to the data.

Ethical Considerations

This study was approved by the South African Medical Research Council (SAMRC) ethics committee in October 2017 (EC021-7/2016). This project was reviewed in accordance with the Centers for Disease Control and Prevention (CDC) human research protection procedures and was determined to be research, but CDC investigators did not interact with human subjects or have access to identifiable data or specimens for research purposes. Additional approval was received from the Department of Health of the KZN provinces and uThukela district in October 2017. All participants completed a consent form before participating in the study. Confidentiality and privacy were maintained using study pseudonyms instead of participant's personal details in all our records. Audio recordings, transcripts, and life story documents were stored at SAMRC in a password-protected file. Due to the sensitive nature of the topic under investigation, referral pamphlets with details of support centers were made available to participants who became emotionally distressed during the interview. Furthermore, interviewers received weekly debriefing sessions with the project lead and immediate supervisors.

Results

The study sample consisted of nine male, Black African participants who attended health care facilities in uThukela District (Table 1). The median age was 40 years (interquartile range [IQR]: 31–41), with more than

Table 1. Demographic Characteristics of Participants, uThukela District, KwaZulu-Natal, South Africa, 2019.

Characteristic	<i>n</i> = 9 (100)
Sex, <i>n</i> (%)	
Male	9 (100)
Facility type, <i>n</i> (%)	
Mobile clinic	2 (22.2)
PHC Clinic	4 (44.4)
CHC	1 (11.1)
Gateway	2 (22.2)
Age (years)	
Median (IQR)	40 (31–41)
Age categories (years), <i>n</i> (%)	
20–29	2 (22.2)
30–39	2 (22.2)
40 and older	5 (55.6)
Population group, <i>n</i> (%)	
Black (African)	9 (100)
Place of residence, <i>n</i> (%)	
Rural	3 (33.3)
Urban	6 (66.7)
Education level, <i>n</i> (%)	
Primary	2 (22.2)
Secondary	5 (55.6)
Matriculated	2 (22.2)
Marital status, <i>n</i> (%)	
Married, living together	2 (22.2)
Cohabiting	2 (22.2)
Dating, not living together	4 (44.4)
Single	1 (11.1)
Employment status in the past year, <i>n</i> (%)	
Worked each month	3 (33.3)
Worked for most months	2 (22.2)
Once in a while	2 (22.2)
Never worked	2 (22.2)

Note. IQR = interquartile range; PHC = Primary Health Care; CHC = Community Health Center.

half of the participants ($n = 5$; 55.6%) above the age of 40 years. Five out of the nine participants (55.6%) had obtained a secondary level of education. One participant (11.1%) was not in a romantic relationship, and two participants (22.2%) had not been employed within the last 12 months preceding the data collection.

Key Themes

Barriers to Linkage to HIV Treatment. Barriers to linkage to HIV treatment were similar across all the participants in the study, despite their age and socioeconomic background. Most of the barriers reported by participants were a combination of personal and community-level factors deterring men from accessing HIV treatment.

Individual Factors. Individual factors emerged as the most important barriers to HIV treatment among men. These included lack of emotional readiness, perceived side effects, dislike for pills, negative side effects from ARVs, perceptions about ARVs, preference for alternative medications, and perceived stigma.

Lack of Emotional Readiness. Participants who did not link to care ($n = 4$, 44%) stated emotional readiness as the reason for the delay in linking to care. They expressed feelings of being hurt and disturbed by the diagnosis, hence they did not link. Three (33%) participants felt they needed time to accept the diagnosis before linking to care, as illustrated:

Yes, I was disturbed emotionally and hurt. I then took a journey to Johannesburg . . . in September . . . I came back home in October . . . (BISC-NL-M31)

Other Modes of Treatment Used by Participants. The idea of using other modes of treatment such as traditional, religious, and immune boosters rather than starting HIV treatment came up as the reason for not immediately linking to care. Participants stated that they preferred using traditional medicine before going back to the clinic for HIV treatment. Men expressed their inclination to traditional-based remedies and how they used them as immune boosters.

I have tried that because I want to start treatment after I have taken traditional medication first. Do you understand me? I did it, I need to finish using these things and then go back to the doctor. (UECG_NL_M40)

Yes, I once tried Gambu, I once bought Gambu and drank it. No, they do advertise on radios and say "drink Gambu, it assists with CD4 count and so on and so on." (UCSC_NL_M38)

Progression of HIV Infection. The issue of waiting for the HIV infection to progress before seeking care was another reason for not linking to care. Some participants believe that there is no reason to seek care if they are not feeling sick:

I told even Thulani [fieldworker] that I will collect pills if I see that I am sick. Since I am not sick, they are causing sickness; really, . . . I would not continue with them [ARVs] . . . , I will start taking them [ARVs] when I am sick because if I am saying that I am taking them while I am not sick they will make me sick and how am I going to survive? (UCSC_NL_M38)

Perceived Medication Side Effects. Two (22%) participants did not link or remain in care because of their perceptions and experience of the negative side effects of

initiating ART. Participants who had not been linked or retained in care expressed their fears regarding this:

Another reason [for not linking to care] is that sometimes I see people . . . I know. I do not know how they do this thing of disclosing that they have HIV. There is someone who has shown me HIV medication, he says "he is taking pills." When I see him, he has changed, he is not like before. He changed when he started, sometimes people gain weight and become fat while others . . . their skin becomes darker. I am scared that will happen to me when I start taking pills. (BNHC-NL-M20)

. . . plus, they [ARVs] are causing disability, I saw that in another lady. (UECG_NL_M40)

Fear of Treatment Non-Adherence. Participants expressed fear of treatment non-adherence, based on information received during counseling that taking ARVs is a lifelong treatment. These are extracts from a participant who felt he might default in taking treatment if they start, hence he did not link to care.

It is very difficult, maybe I can take my treatment for two days. That is why I do not like taking it [ARVs] because they say if you have started you are not supposed to stop. (BNHC_NL_M20)

Perceived Stigma and Confidentiality Concerns. For some participants, linking to care meant their HIV status will be known by other community members, as queues in the clinic segregate patients, based on the services they want to access. Three (33%) participants preferred linkage to care only if the HIV treatment is provided in their homes so that they could have some privacy. Others felt they should attend clinics far from their community because they feared being stigmatized.

Here this person has TB, he/she is carrying a yellow card. When you check, the other one is carrying a white card and the other one is carrying a green card "we [PLHIV] are carrying green cards, . . .," do you get that. Now it is seen that those who are carrying a green card, it is those who are [diagnosed with HIV]. (UECG_NL_M40)

Family, Community, and Work-Level Factor—Barriers. Men who had issues with linking to care did not disclose their HIV status to significant others. The issue of food, loss of time at work, lack of transport money, and perceived stigma are some of the subthemes that emerged at this level. One participant had concerns regarding losing time at work and telling his manager frequently that he is going to the clinic.

Socioeconomic Factors. Lack of income appeared to be a factor in not linking to care. One participant who did not link to care at 3 months expressed the possibility of

not having (enough) food at home as a hindering factor to linking to HIV care. This is based on the participant's understanding that ART should not be taken on an empty stomach. The participant complained about not having money to pay for transport going to the clinic.

. . . then I have that problem. You find that to my boss I will say I am going to the doctor, then they will say "every month?." (UECG_NL_M40)

Enablers to Linkage to HIV Care

Individual Factors. Two (22%) participants who came to the facility did so when they were already ill. This was a key motivator for people to link to care, stating that they feared HIV progressing and that they wanted to live longer.

Fear of HIV Progressing. These participants expressed feelings of being scared to die or be seen as sick by other people, hence they linked to care.

I wanted to live and for you to mitigate it [HIV] you need to start taking medication early because if you are saying "I will see after this time," you can end up suffering from other disease aside and now you are very sick even medication can't assist. (EOWM_L_M51)

A participant who started treatment on the same day of testing HIV-positive did so to avoid a drop in his CD4 count and to prevent the illness from getting worse.

I: And then how long did it take you to start treatment, or you started on that day?

P: I started on that day. That lady drew my blood, and it was not that bad because I had taken a decision. I know that even if it goes up today you will never know what it will be like the following week. My sister had that problem. They stopped her . . . they stopped giving her medication because her CD4 count was high not knowing that it was going to drop. She almost died when they gave her medication. Also, days are not the same as one is living under such depressing conditions. That is why I told that lady to give me medication while I still felt fine. (SEUWBC-L-M40)

Acceptance of Status. Accepting one's HIV-positive status compared with denialism was another individual enabler for participants who were linked to care. This is because those who accepted their status were receptive to the advice given by health care providers about the importance of early initiation to treatment.

The time I was here . . . I started going to the clinic; I was satisfied because I was assisted. I accepted all what they were saying. I had no choice. There was no other decision I

could have taken because I cannot kill myself. I decided to take a decision that I must use what they are going to give me. I took that decision [accepted to link to care]. (ECHC-L-M41)

I am just free; I have indeed accepted. As I am saying that people who know about my situation are supportive, they look after me, they ask me whether I have taken medication and other things. So, I realise that these people have accepted me in all forms, there is no reason to distance myself from them because they are bringing me close to them as a human being. (EOWM_L_M51)

Disclosure. Participants who were linked to care had disclosed their status to their significant other(s). All those who disclosed, revealed that they did not experience stigma from their friends and family. Disclosure played an important part for participants in this study because it was directly linked to receiving support from significant and immediate family members.

Family, Friends, and Community-Level Factors—Enablers. Those who disclosed their status were more likely to receive support from the community, family, and workplace. These sources of support are discussed separately below.

Support From Family and Friends. Family members played an important role in enabling participants to initiate treatment. The support from significant others was mainly emotional support. Similarly, having a family member who has already been diagnosed as HIV-positive made it easy for participants to receive support and encouragement from the family members to link to care:

I ended up explaining to her and it was just that she is someone who is very open . . . She then told me that "I started long time; I am living with this situation, I do not have a problem. I am still alive . . ." She told me that she started [treatment] a long time ago. (BISC_L_M47)

At times, family members provided emotional care, to ensure that participants adjust to their new status:

It helped so much [to disclose], even though I have not told all people who are close to me because people are not the same. But it helped me because I feel like someone who is accepted and supported all the time. Again, people I have told they ask me all the time whether I have done certain things "yes I have done it," "did you eat?," "yes, I have eaten," "are you having enough sleep?," "yes I sleep enough time." They also say that I must make sure on that one because I will turn back my life. (EOWM-L-M51)

Support From Peers. Of the study participants, only one disclosed their status to their work colleague. As with

family and friends, colleagues who were told about the status were supportive.

I told her that I have tested, and they found that I have HIV. Ah she accepted and became supportive as I was saying that she is very supportive. Eh at work . . . ah what can I say . . . there is a lady who is my friend. Ah I told her that I tested, and I discovered that I have HIV my friend. So she is also very supportive because when I am at work she helps me so much, she would say "my friend since it has been found that you have HIV, 1. You need to eat fruits and vegetables, ensure that you eat healthy food, and make sure that you take your medication on time." She was someone who was encouraging me most of the time because she is someone who I was very close with, even now we support each other. (EOWM-L-M51)

Health System–Level Factors. The health system factors which enabled participants to link to care included positive testing experience, the availability of ARVs, being transferred to a closer facility, change in the treatment guidelines, as well as presence of the linkage to care support team in the facilities.

Positive Experience During HIV Testing. Positive testing experience of getting adequate counseling, patience, and emotional support from health care professionals enabled participants to link to care:

They treated me well, with respect, they tested us. The first time they said, "there is no virus," . . . When I came back for the second time they told me that "you see you have HIV now," they said "what do you think you should do, do you want to start taking pills or not?." I said, "if you have it there, then it must be something I need to use," then they registered me, and I entered in another door of collecting pills. They said I must go for . . . taking blood. (+BISC_L_M47)

Accessibility of ART. Participants indicated that health care providers were able to assist those who had difficulties accessing ART in the facilities they tested in with transfers, which aided with linkage to care:

They did not give me medication, but they wrote a letter for me, I said I will not have money for transport, it is better if I go to the clinic that is not far from me. It will be difficult because I would have to walk that mountain if I do not have money. Sometimes I used that bush route, where you crossed the bridge, I walked to get medication. (EHC-L-M41)

Discussion

In this study, we investigated the barriers and facilitating factors to HIV treatment among men in the uThukela district, KwaZulu-Natal province, South Africa. Our study participants shared important insights for understanding

the challenges deterring men from accessing HIV treatment in the district. The results show that lack of emotional readiness, progression of HIV infection, perceived ART side effects, perceived stigma and confidentiality concerns, work commitments, and lack of financial income deter men from accessing HIV treatment. We also identified factors such as acceptance of HIV diagnosis status; having disclosed and received support from immediate family members or friends, or peers; knowing someone who was diagnosed with HIV; positive engagement with a health care provider during HIV testing service; and accessibility of ART serve as enablers for linkage to HIV treatment among men.

Similar findings have been reported in resource-limited settings, where personal and structural barriers including lack of emotional readiness, transport costs, long waiting times in public health care facilities, privacy concerns, and stigma remain persistent and continue to deter men from accessing HIV services (Hlongwa et al., 2020; Rhead et al., 2019). Men with reactive HIV self-test results have recently been reported to have similar barriers to be linked to HIV care (Hlongwa et al., 2022). A study conducted in a comparable setting indicated that due to fear of testing positive for HIV, some men believed that once their HIV-positive status was revealed, their wives or partners would abandon them or refuse them sex, suggesting an important indication of a lack of emotional readiness (Mambanga et al., 2016). The stigma associated with being HIV-positive still exists in many areas, and it has a detrimental impact on men's access and use of HIV services in public health care facilities. As such, men avoid accessing HIV services from local clinics for fear of being seen or judged by people in their neighborhoods (Hlongwa et al., 2019). Due to time constraints and work demands, working men are more likely to find it challenging to honor clinic appointments and access HIV treatment services during normal working hours because these often compete with their working commitments (Hlongwa et al., 2020; Okal et al., 2020), suggesting the importance of establishing flexible clinic operating hours to attract working individuals. The use of decentralized community-based HIV testing and ART dispensing, as well as mobile ART pick-up points, may also minimize barriers associated with clinic setting, such as stigma, confidentiality, and long waiting times, and may improve access to HIV treatment among men (Hlongwa et al., 2019; Okal et al., 2020).

Similar to this study, disclosure of HIV diagnosis to people within one's immediate network was reported to be positively associated with improving access to HIV treatment in comparable settings (Amolloh et al., 2011; Fiorentino et al., 2021). Disclosing an HIV diagnosis can be emotionally demanding, and there are hazards involved, such as rejection, stigma, judgments, and fear (Doat et al.,

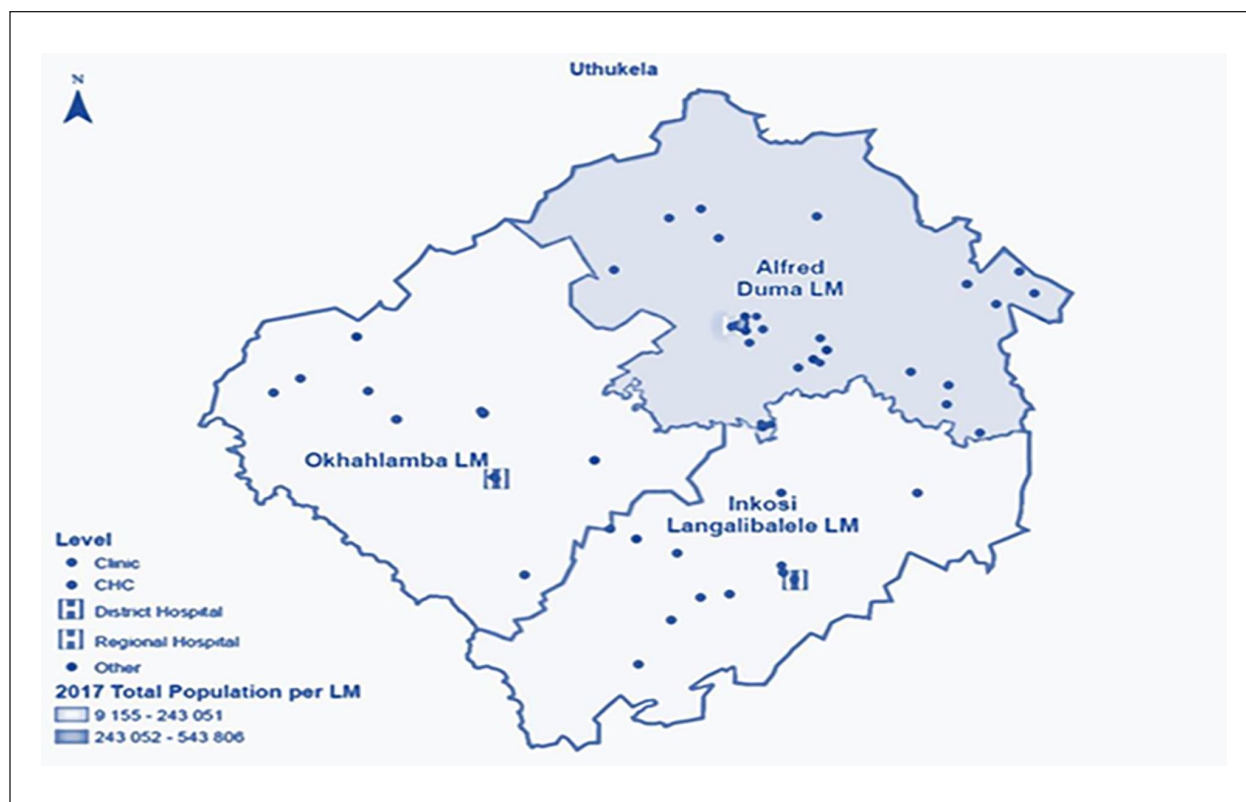


Figure 1. uThukela District Municipality Map.

2019; Nyamhanga et al., 2013). However, there are also important benefits including social support which may enable individuals to cope emotionally, accept HIV diagnosis, shift attitudes, and improve early linkage and retention to HIV treatment (Okal et al., 2020). To enable access to HIV treatment, our findings underscore the need for patient support groups, educational, and empowering initiatives for men newly diagnosed with HIV.

Health care facilities have been reported to deter men from accessing HIV services due to fears of confidentiality, as well as unsupportive and unfriendly reactions toward them when seeking HIV-related services (Harichund et al., 2019; Leichliter et al., 2011; Sharma et al., 2017). In some cases, there have been some reports of incidents regarding health care providers' failure to protect the confidentiality of patients (De Allegri et al., 2015). These factors contribute to men's concerns regarding the confidentiality of their HIV testing results (Harichund et al., 2019). In this study, we identified that positive engagement with a health care provider during HIV testing service and accessibility of ART were key enabling factors for improving men's engagement with HIV treatment. The South African health care facilities are known for being understaffed and overburdened with patients. As a result, excessive waiting times may limit possibilities for individuals to engage with health care

practitioners, implying the need for intervention measures to address these issues.

While this study provides an understanding of barriers and facilitators to HIV treatment among men, it has notable limitations. Because this study's sampling frame was confined to men seeking health care services in some public health care facilities in the uThukela district, men who do not frequent public health clinics may have been left out or under-represented. Therefore, it is possible that perceptions of our participants may differ compared with those of the excluded men. Our sample size is small, therefore, the perspectives of men presented in this study may not be representative of men in general. Conducting interviews in a public health care facility may have caused some discomfort for some participants, which could have resulted in less-than-ideal responses from participants. Furthermore, the participants may have suppressed information thought to have the potential to lead to judgments. However, our research assistants were well trained to manage potential challenges and gather rich perspectives necessary for answering our research questions.

Conclusion

Improving early access to HIV treatment among men is essential for their individual well-being and as part of the

prevention of HIV infections and mortality at a population level. Understanding barriers and enablers to HIV treatment are important to inform the design of targeted intervention strategies aimed at improving linkage and retention to HIV treatment among men in the era of the universal test-and-treat implementation strategy.

Author Contributions

MH conceptualized and designed the study, as well as prepared the initial draft. All the authors reviewed the manuscript and approved the final version of the manuscript.

Availability of Data and Materials

All the data analyzed and reported in this paper will be made available upon request.


Declaration of Conflicting Interests

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ORCID iD

Mbuzeleni Hlongwa  <https://orcid.org/0000-0002-5352-5658>

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