



Treatment Supporter Experiences of HIV Patients Attending a Tertiary Health Facility in Rivers State.

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ABSTRACT

Background: Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) remains a significant public health problem across continents. Social support systems have been advocated in resource-constrained settings to improve treatment adherence and patient care. This study explored treatment supporter experiences among HIV patients in the University of Port Harcourt Teaching Hospital, (UPTH) Port Harcourt.

Methods: This study was an exploratory qualitative study using a narrative approach with focused group discussions (FGDs) involving adult clients living with HIV attending the anti-retroviral clinic at UPTH. Four FGDs (12 participants in each FGD) were recruited by purposive sampling and analyzed thematically.

Results: FGDs revealed that those with treatment supporters (TS) perceived that having a treatment supporter was beneficial. However, those who had no TS expressed their uncertainties about having a TS as stigma and discrimination. The study participants with TS also reported that they received financial, emotional, and physical support while those without TS did not think TS was necessary.

Conclusion: This study highlights the importance of TS given the chronicity and psychosocial dimension of HIV. This strategy enhances their coping mechanisms and treatment adherence. There is therefore the need for intensive public health education, advocacy, and community sensitization by all stakeholders.

1.1 BACKGROUND

The HIV epidemic, since its beginning till present accounts for approximately 40.4 million deaths, and about 85.6 million people are infected with the virus.(1) By the end of 2022, 39.0 million persons globally were HIV positive.(1) The disease burden differs significantly between regions and nations. It is reported that the WHO African region is the most affected with approximately 1 in every 25 adults living with HIV and comprising more than two-thirds of all HIV-positive individuals globally. There are global concerted efforts targeted at interrupting disease transmission, achieving treatment adherence, and enhancing viral suppression.(2) In recent years, ART regimens have evolved; they are currently more potent, better tolerated, and widely available in fixed-dose combinations for individuals of all ages.(3) These improvements have improved adherence to treatment and facilitated viral suppression.(3) However, the psychosocial dimension in HIV care, though often neglected is critical to the attainment of successful clinical outcomes and subsequent survival among HIV-infected individuals particularly in Sub-Saharan Africa.(4)

The World Health Organization recommends a range of facility, home, and community-level interventions for Persons Living with HIV (PLHIV) that support treatment adherence, psycho-social care, retention, and re-engagement in their management. Patient-centred care models have been adopted by different nations to enhance adherence. In Sub-Saharan Africa, several approaches to improving adherence have been used such as adherence counselling, reminder systems like alarms and calendars, SMS messaging, electronic pill devices, adherence support clubs and the use of treatment supporters.(5)(6)(7) The use of patient-nominated treatment supporters has been recommended by the WHO and adopted into HIV programmes as HIV patients are more likely to be more open to their confidants in their home environment.(8)(9) Also, the chronicity of HIV infection and its accompanying life-long management have made retention in care crucial. Hence PLWHA often rely on others for the much needed help to enable them adhere to their treatment regimens and keep clinic appointments. (4) The concept of the use of treatment supporters has been employed in chronic disease management such as diabetes, tuberculosis and hypertension, to improve and enhance retention in the care of affected patients.(10)

The World Health Organization defined a treatment supporter as a person (usually a family member, friend or neighbor) nominated by the patient based on trust whose main responsibility is to ensure that the patient takes his or her drugs as prescribed throughout the course of the treatment.(11)

These treatment supporters may be close friends or members of the patient's family who are chosen by the patient. (11) Studies have shown that HIV

patients with the necessary support have a higher likelihood of coping with the illness, keeping clinic appointments and subsequently improving adherence to prescribed medications.(12)(4) The relevance of this strategy makes it expedient to be incorporated as a viable support component in HIV care and management. (13)

Patient-nominated treatment supporters are called diverse names in different settings such as treatment partners, care buddies, medicine companions, assistants, or treatment buddies.(14)(12)(4)(15)(16) In some places, they play vital roles in ensuring that infected individuals and clinic visits. (14)(4) The expected role of a treatment supporter comes in diverse forms.(4) Their assistance impacts directly on the patient but subsequently affects the family, community and the nation at large.(11) The scope of this role may include reminding the patients of their hospital appointments, accompanying the patient for their clinic visits, sometimes assisting to pick up their medications and in drug adherence(4)(12)(14) Additionally, they may help in fostering health-related behaviours for example, restricting drug and substance use.(17) Furthermore, the treatment supporter also helps to restore confidence in these patients, who often times are battling with low self-esteem. (4)(18)(19) This way, the patients and their families are encouraged.(12) The services of a treatment supporter are unpaid for, they usually are not officially taught, neither are they expected by managing physicians to carry out certain roles such as counselling or home-based care.(20)(21) The expected function of these treatment buddies is to ensure that the patients adhere to the prescribed course of therapy.(14)(21)

Several qualitative studies in Asia and Africa(4)(14)(15)(18)(19)(22) have reported conflicting patient's experiences and opinions on the role of treatment supporters in their care and management. Some patients expressed fears about involving treatment supporters in their care. It can be deduced from this that despite scale-up of ART and increased HIV awareness, PLWHA are still grappling with apprehension on issues bothering on stigma and discrimination. This can have a detrimental effect on the psychological well-being and the quality of life of persons living with HIV. Furthermore, HIV-related stigma and discrimination have been linked to mental health disorders such as anxiety and depression. These can lead to poor adherence to ART and subsequent adverse health outcomes. The use of treatment supporters, though often not necessary in enrolment in HIV care in our settings is a viable treatment strategy with evidence of its impact in HIV care and management. However, certain research gaps exist as there are few, recent and relevant published work on the topic. Also, there are conflicting findings on the subject matter underscoring the need for more research in this area to corroborate the findings and also depict the true situation in our local setting.(23)(24) This study aims to explore treatment supporter experiences among HIV

patients attending the ante-retroviral clinic in a tertiary health facility in Rivers State.

2. METHODOLOGY

2.1. Study Area

This study was carried out at the anti-retroviral clinic of the University of Port Harcourt Teaching Hospital, Port Harcourt. The anti-retroviral clinic runs daily with an average of 400 patients seen weekly. At the time of this study, the test and treat approach as recommended by WHO had taken effect.(2) The ARV clinic adopted and effected the WHO test and treat approach in June 2017. The patients are required to do a confirmatory HIV test. Once they are enrolled into care, they undergo sessions of adherence counseling and educated on HIV infection, the untoward effects of the antiretroviral drugs etc. They are also asked to identify a treatment supporter to assist in medication adherence. When started on ART, they are expected to return to the clinic after two weeks, where they are reviewed for any side effects and if none, they are scheduled on two monthly visits for medication pickups. Adherence counseling is done at each refill visit. CD4 monitoring is done every three months and viral load monitoring every six months.(25)

2.2 Study Design

This was an exploratory, qualitative cross-sectional study design.

2.3 Study Population

HIV-infected adult patients accessing treatment at the ARV clinic of University of Port Harcourt Teaching Hospital. The study respondents comprised of two groups: patients who had a treatment supporter and those who did not have a treatment supporter.

2.4 Sample Size Determination

For each study group, two FGDs were required - one male and one female, giving a total of 4 FGDs).Each FGD comprised of 12 persons,(26) giving a total of 48 study participants.

2.5 Sampling technique

Purposive Sampling was employed in the selection of the study respondents. Those selected were those who met the eligibility criteria using the clinic care cards. Eligible HIV patients were selected as they came for the clinic consultation. The clinic care cards had the patients' information such as duration of HAART, whether they had a treatment supporter or not, presence or absence of known chronic illnesses such as hypertension, tuberculosis or diabetes mellitus. Those who had been on HAART for at least six months, who had no known

chronic illness, and had treatment supporters formed the sampling frame for the group of patients with treatment supporters. Similarly, patients who had been on HAART for at least six months, who had no known chronic illness but had no treatment supporters formed the sampling frame for the group of patients who had no treatment supporters. The cards of those who met the eligibility criteria for both groups were assigned identification numbers. The identification numbers were assigned to avoid double selection. The purpose of the study was explained to the selected patients, their confidentiality was assured and informed consent was obtained.

2.6 Study Instrument

2.6.1 Focus Group Guide

The Focus Group Guide contained a list of discussion topics used to assess patients' views on the role of treatment supporters in their care. This focus group discussion guide was adapted from similar studies (19).(27)

2.7 Data Collection Methods

The qualitative method involved the use of focus group discussions. Participants were educated on the aim and process of the FGD by the primary researcher. Consent was obtained from the participants and their confidentiality assured. A schedule was subsequently drawn for the FGDs after their consultations.

Focus group discussions were carried out in a quiet and comfortable environment (in the seminar room of the department of Community Medicine) in the hospital. There were two FGDs (male and female) in each group (those who had treatment supporters and those who did not have treatment supporters) making a total of four FGDs. Twelve participants presented for each of the focus group discussion (FGD) and participated in the process. These constituted a total of 48 participants for the qualitative study.

All focus group discussions were moderated by the primary researcher. Research assistants (a note-taker/a recorder) were trained to assist with note taking including non-verbal cues and tape recording of the sessions. Each FGD session lasted for about 45-60 minutes.

2.8 Statistical Analysis

The recorded sessions from the FGDs were transcribed verbatim into a word document. There was no need for translations as English language was used for all sessions. Participants' responses were represented as quotes. The responses were organized based on the questions for each group (treatment supporter and no treatment supporter). These were then coded based on emerging themes which correspond to the key categories. The thematic analysis was employed in data analysis with familiarization through repetitive reading,

theme generation, application of codes to the transcripts, and interpretation.

2.9 Ethical Considerations

Ethical approval was obtained from the Ethics Committee of the University of Port- Harcourt Teaching Hospital before the study commenced. A written permission to conduct the study was sought and obtained from the Head of the ARV clinic. A written informed consent was obtained from eligible participants in this study by signing and returning a consent form prepared for this purpose. All study participants were assured of confidentiality of their opinions and responses. They were also informed about the voluntary nature of the study and were free to opt out of the study at any stage without being penalized.

3. RESULTS

The age ranges of the study participants in the FGDs who had treatment supporters and those who did not have were 27 to 40 years and 25 to 40 years respectively. In both groups, 10(41.7%) and 13(54.2%) respectively were married. The majority had secondary level education [16(66.7%) in the treatment supporter group and 18(75.0%) in the no treatment supporter group]. The predominant occupation in both groups was business 13(54.2%) and 11(45.8%) respectively. The responses were coded and the main themes and sub themes are as showed in Fig 1 below

The responses were coded and the main themes and sub themes are as showed in the diagram.

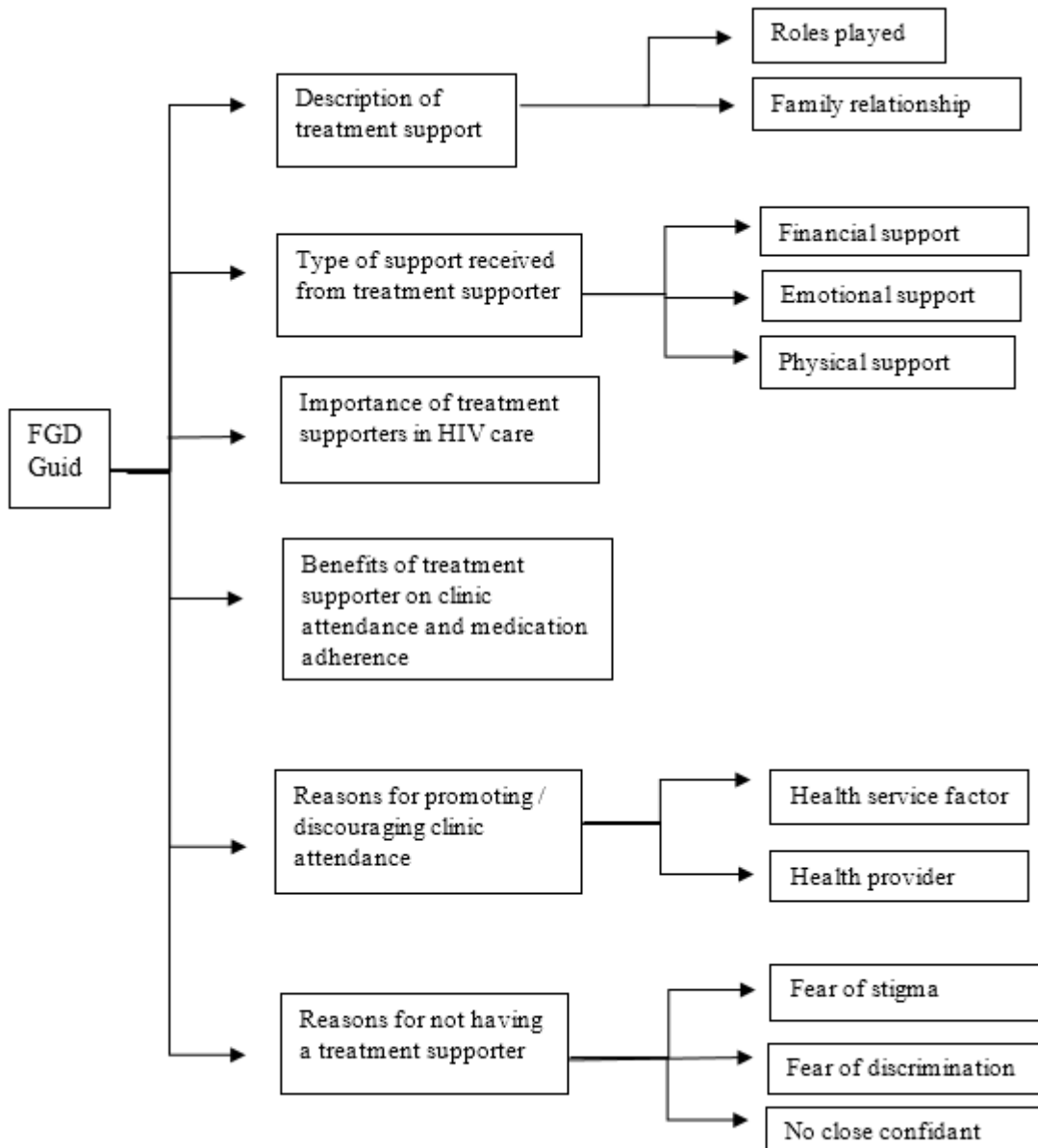


Fig 1. FGD coding tree for patients

Table 1: Emerging themes on description of a treatment supporter

Sub-themes	Treatment supporter group	Non-treatment supporter group
Roles played	<p><i>"A treatment supporter is a close relative who you can trust and will help you cope with the disease"</i> (Participant 5. male, 35years)</p> <p><i>"A treatment supporter is someone who reminds you to take your drugs"</i>(Male FGD, 37 years, married, civil servant),</p>	<p><i>" A treatment supporter is a someone who helps you with your treatment"</i> (33years, female, married, business man)</p> <p><i>" A treatment supporter is a person who can remind you to go to the clinic"</i>(Male FGD, 32years, single, civil servant),</p>
Relationship of treatment supporter	<i>"A treatment supporter is your sister."</i> (female, 39 years, widow, self-employed)	<i>"A treatment supporter can be a close friend or relative."</i> (male, 30 years, single, business woman)

The study participants who had treatment supporters were very responsive to the question on what they understood by the term, treatment supporter. Some of the respondents defined a treatment supporter based on relationship (e.g. sister, daughter) while others identified

a treatment supporter based on their specific roles irrespective of the relationship. Study respondents who had no treatment supporter also defined a treatment supporter based on relationship and the perceived specific roles they played.

Table 2: Emerging themes on type of support received from treatment supporter

Sub-Themes	Treatment Supporter group	Non-Treatment group
Support received from treatment supporter (Physical support)	<p><i>"A treatment supporter is someone who you can trust with some of your issues, ,someone who will check on you from time to time"</i>(Male,, 40 years, single, civil servant)</p> <p><i>"My husband helps me pick my drugs when I'm not around, He also encourages me to eat healthy, we support ourselves since we both have the disease"</i>↓ (female , 30years, married, contract staff)</p> <p><i>"My wife gives me emotional support, She listens to my worries when I'm tired of life ((pause)) and she reminds me to take my drugs"</i> (male, 35years, married, self-employed)</p>	<i>"A treatment supporter is someone who can help you. and maybe give you money to buy food"</i> (Male, 39 years, single, civil servant)

The emerging themes from responses of the study participants on the type of support that they received from their treatment supporters were financial support, emotional support and physical support. Also concerning the response on the importance of having a treatment supporter in HIV care, all the participants in the group that had treatment supporters gave affirmatory responses while majority of the participants in the group

that did not have treatment supporters gave contradictory answers. Also majority of the respondents in the group that did not have treatment supporters said they did not think there was any support they could receive from a treatment supporter. This response contrasted with the responses of the participants in the treatment supporter group who stated the myriad of support they received from their treatment supporters.

Table 3: Emerging themes on factors that may promote/discourage your clinic attendance

Sub-themes	Treatment Supporter group	Non-Treatment Supporter group
Health service factor	<i>"If we spend less time when we come to see the doctor, then many patients will want to come"</i> (Male, 27years, single, student)	<i>"We should spend less time when we come to see the doctor"</i> (Female, 40 years, married, housewife)
Health provider factor	<i>"We spent a lot of time in the clinic before the doctor attends to us even when we come early"</i> (female, 35 years, married, trader)	<i>"The time we spent here in the hospital is too much, the nurses sometimes do not empathize with us"</i> (Male, 37years, married, business man)

Furthermore, the HIV patients identified factors that either promoted or discouraged adherence to their clinic appointments and these were grouped into themes such as health provider and health service factors. The sub-themes as reported by the participants in both groups

were attitude of health workers, waiting time at the clinics, and encouragement from treatment supporters. Almost all the participants agreed that poor attitude of health workers and long waiting time at the clinics may discourage them from attending the clinic.

Table 4: Emerging themes on the reasons for not having a treatment supporter

Sub-themes	Treatment Supporter group	Non-Treatment Supporter group
Fear of stigma		<i>"fear of the unknown".</i>
Fear of stigmatization		<i>"I don't think I want anyone to know my status, my neighbours may hear about it."</i> (Male, 40 years, widower, trader) <i>"I'm afraid of being stigmatized ((pause)) and rejected by my family and friends."</i> (Male, 27years, single, student) <i>"I'm afraid my friends and neighbours will run away from me."</i> ↓; <i>"I don't want my wife to know about it, She will leave me."</i> ↓ (Male, 35 years, contract staff) <i>"My husband died of HIV, people don't know and I don't want anybody to know"</i> ↓ (Female , 40 years, trader)

There were diverse reasons why some of the HIV patients did not have a treatment supporter. Almost all the participants in the male and female focus group discussions of those who did not have treatment

supporters affirmed that fear of being stigmatized and discrimination were reasons why they didn't have treatment supporters.

Table 5: Emerging themes on the relationship between having a treatment supporter and clinic attendance

Sub-themes	Treatment Supporter group	Non-Treatment Supporter group
Impact on clinic attendance	<p><i>"Yes, my supporter encourages me to come and see the doctor when I'm sick. She also follows me to the clinic sometimes."</i>(Female FGD, 37years, married, self-employed)</p> <p>A contrary response was, <i>"Not really, ((shrugs)) I come to the clinic when I'm supposed to, I also take my drugs everyday"</i> (Female, 27years, single, student)</p>	
Improve clinic attendance	<p><i>"the doctors should be more patient and the hospital management should make it in such a way that the waiting time is short."</i></p>	Other participants said <i>"they should employ more people to attend to us"</i>

Diverse responses were stated by the HIV patients from on how having a treatment supporter has improved their clinic attendance. Majority of the participants in the treatment supporter group said that having a treatment supporter was important and had improved their clinic attendance.

4. DISCUSSION

In this study FGD participants who had treatment supporters and those who did not have correctly identified the characteristics and roles of treatment supporters. This was however where the concordance ended. Persons who benefitted from having a treatment supporter affirmed them to be important for ensuring treatment adherence, providing financial, emotional and physical support. Persons who didn't have a treatment supporter stated fear of stigmatization and discrimination as major reasons why they didn't want a treatment supporter.

Comparing the finding above with other studies that explored patients' perspectives on the role of treatment supporters in HIV care(19)-(14)-(22) Popular opinions of HIV patients on the assistance they got from their treatment supporters include reminding them to take their drugs and financial support. The implication of this is that drug adherence which is a predictor of viral suppression and treatment success can be improved by the role of treatment supporters. This study illustrates the

value of treatment supporters to maintaining good adherence. This also corroborates with others studies that reported that they acted as drug reminders, and helped them keep to their clinic appointments. (15) (18) Other supportive roles that they offered included financial support, emotional support, and physical support. These help to enhance overall wellbeing and quality of life of the patients. This is critical to HIV care and management considering the chronicity and the psychosocial problems that PLHIV have to cope with in the course of their treatment.

Clients who did not have a treatment supporter reported fear of stigmatization and discrimination as the primary reasons why they didn't want a treatment supporter. These findings are consistent with similar studies(4)-(24) that observed PLHIV expressed their fears on involving treatment supporters in their care. This implies that despite ART scale-up and increased HIV sensitization, PLHIV are still troubled with concerns on issues like stigmatization and discrimination. This therefore underscores the importance of intensifying patient counselling, public health education and community-wide sensitization.

The strength of this study relates to its explorative nature as the study participants were able to express their views and opinions on the experiences, they had with their treatment supporters. The study also highlighted major concerns and uncertainties patients who had no treatment supporters faced. The limitations are however that in assessing some of the information

from the patients in this study, there could be a possibility of social desirability bias. Anonymity and confidentiality were employed in this study to minimize this type of bias.

5. CONCLUSION

The role of patient-nominated treatment supporters in HIV care is critical in the care and management of PLHIV. This strategy is imperative given the chronicity and psychosocial dimension of HIV, and is well known to enhance their likelihood of coping with the illness, keeping clinic appointments and improving adherence to medications among other benefits. This study highlights the importance of more intensive public health education, advocacy and community-wide sensitization by Healthcare providers and all stakeholders in order to reach and educate affected individuals and families on the need for treatment supporters. This strategy should fittingly be incorporated as a viable support component in HIV care and management. Their assistance transcends the direct effects on the patient, to consequently impact the family, community and the nation at large.

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REFERENCES

- World Health Organization. Global Health Observatory [Internet]. 2024 [cited 2024 Jan 31]. Available from: <https://www.who.int/data/gho/data/themes/hiv-aids>
- Organization WH. Progress report 2016: prevent HIV, test and treat all: WHO support for country impact. World Health Organization; 2016.
- Caplan MR, Daar ES, Corado KC. Next generation fixed dose combination pharmacotherapies for treating HIV. *Expert Opin Pharmacother*. 2018;19(6):589–96.
- O’Laughlin KN, Wyatt MA, Kaaya S, Bangsberg DR, Ware NC. How treatment partners help: social analysis of an African adherence support intervention. *AIDS Behav*. 2012;16:1308–15.
- Mills EJ, Lester R, Thorlund K, Lorenzi M, Muldoon K, Kanters S, et al. Interventions to promote adherence to antiretroviral therapy in Africa: a network meta-analysis. *Lancet HIV*. 2014;1(3):e104–11.
- Church K, Kiweewa F, Dasgupta A, Mwangome M, Mpandaguta E, Gómez-Olivé FX, et al. A comparative analysis of national HIV policies in six African countries with generalized epidemics. *Bull World Health Organ*. 2015;93:457–67.
- Maduka O, Tobin-West CI. Adherence counseling and reminder text messages improve uptake of antiretroviral therapy in a tertiary hospital in Nigeria. *Niger J Clin Pract*. 2013;16(3):302–8.
- Organization WH. Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach. World Health Organization; 2016.
- World Health Organization. Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach. 2021.
- Jaung MS, Willis R, Sharma P, Aebischer Perone S, Frederiksen S, Truppa C, et al. Models of care for patients with hypertension and diabetes in humanitarian crises: a systematic review. *Health Policy Plan*. 2021;36(4):509–32.
- Organization WH. Patient monitoring guidelines for HIV care and antiretroviral therapy (ART). 2006; Available from: https://iris.who.int/bitstream/handle/10665/43382/9241593881_eng.pdf
- Kibaara C, Blat C, Lewis-Kulzer J, Shade S, Mbullo P, Cohen CR, et al. Treatment buddies improve clinic attendance among women but not men on antiretroviral therapy in the Nyanza region of Kenya. *AIDS Res Treat*. 2016;2016.
- Organization WH. Psychosocial support for people with TB, HIV and viral hepatitis in the continuum of care in the WHO European Region. World Health Organization. Regional Office for Europe; 2020.
- Ware NC, Idoko J, Kaaya S, Biraro IA, Wyatt MA, Agbaji O, et al. Explaining adherence success in sub-Saharan Africa: an ethnographic study. *PLoS Med*. 2009;6(1):e1000011.
- Foster SD, Nakamanya S, Kyomuhangi R, Amurwon J, Namara G, Amuron B, et al. The experience of “medicine companions” to support adherence to antiretroviral therapy: quantitative and qualitative data from a trial population in Uganda. *AIDS Care*. 2010;22(sup1):35–43.
- Nakigozi G, Makumbi FE, Bwanika JB, Atuyambe L, Reynolds SJ, Kigozi G, et al. Impact of patient-selected care buddies on adherence to HIV care, disease progression, and conduct of daily life among pre-antiretroviral HIV-infected patients in Rakai, Uganda: a randomized controlled trial. *JAIDS J Acquir Immune Defic Syndr*. 2015;70(1):75–82.
- Olowookere SA, Fatiregun AA, Akinyemi JO, Bamgboye AE, Osagbemi GK. Prevalence and determinants of nonadherence to highly active antiretroviral therapy among people living with HIV/AIDS in Ibadan, Nigeria. *J Infect Dev Ctries*. 2008;2(05):369–72.

18. Bezabhe WM, Chalmers L, Bereznicki LR, Peterson GM, Bimirew MA, Kassie DM. Barriers and facilitators of adherence to antiretroviral drug therapy and retention in care among adult HIV-positive patients: a qualitative study from Ethiopia. *PLoS One*. 2014;9(5):e97353.
19. Duwell MM, Knowlton AR, Nachega JB, Efron A, Goliath R, Morroni C, et al. Patient-nominated, community-based HIV treatment supporters: patient perspectives, feasibility, challenges, and factors for success in HIV-infected South African adults. *AIDS Patient Care STDS*. 2013;27(2):96–102.
20. Chang LW, Kagaayi J, Nakigozi G, Ssempijja V, Packer AH, Serwadda D, et al. Effect of peer health workers on AIDS care in Rakai, Uganda: a cluster-randomized trial. *PLoS One*. 2010;5(6):e10923.
21. Torpey KE, Kabaso ME, Mutale LN, Kamanga MK, Mwangi AJ, Simpungwe J, et al. Adherence support workers: a way to address human resource constraints in antiretroviral treatment programs in the public health setting in Zambia. *PLoS One*. 2008;3(5):e2204.
22. Wasti SP, Simkhada P, Randall J, Freeman J V, Van Teijlingen E. Barriers to and facilitators of antiretroviral therapy adherence in Nepal: a qualitative study. *J Health Popul Nutr*. 2012;30(4):410.
23. Taiwo BO, Idoko JA, Welty LJ, Otoh I, Job G, Iyaji PG, et al. Assessing the virologic and adherence benefits of patient-selected HIV treatment partners in a resource-limited setting. *JAIDS J Acquir Immune Defic Syndr*. 2010;54(1):85–92.
24. Nachega JB, Chaisson RE, Goliath R, Efron A, Chaudhary MA, Ram M, et al. Randomized controlled trial of trained patient-nominated treatment supporters providing partial directly observed antiretroviral therapy. *AIDS*. 2010;24(9):1273.
25. Olakunde BO, Adeyinka DA. Test-and-treat approach to ending HIV epidemic in Nigeria: current status and future prospects of domestic funding. *HIV AIDS Rev Int J HIV-Related Probl*. 2017;16(4):205–11.
26. K.Park. K.Park. Park's textbook of Preventive and Social Medicine. Bhanot Publishers. 2007:717.
27. Root R, Whiteside A. A qualitative study of community home-based care and antiretroviral adherence in Swaziland. *J Int AIDS Soc*. 2013;16(1):17978.

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