

**Enablers of Adherence to Clinic Appointments for Children
attending an Antiretroviral Clinic in Northern Nigeria:
Perspectives of Caregivers and Care Providers**

Journal:	<i>Journal of Tropical Pediatrics</i>
Manuscript ID	JTP-2018-169-OP.R1
Manuscript Type:	Original Paper
Date Submitted by the Author:	n/a
Complete List of Authors:	Musa, Sani; Ahmadu Bello University Teaching Hospital, Paediatrics Umar, Lawal; Ahmadu Bello University/Teaching hospital, Paediatrics Abdullahi, Fatima; Ahmadu Bello University/Teaching hospital, Paediatrics Taegtmeier, Miriam; Liverpool School of Tropical Medicine, Clinical Sciences/International Public Health Olorukooba, Aira; Ahmadu Bello University/Teaching hospital, Paediatrics Abdullahi, Sakinatu; Ahmadu Bello University Faculty of Medicine, PAEDIATRICS Usman, Nazir; Ahmadu Bello University Teaching Hospital, Paediatrics Alfa, Abdullahi; Ahmadu Bello University/Teaching hospital, Paediatrics
Keywords:	HIV, Children, Enablers, Retention, Care

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Enablers of Adherence to Clinic Appointments for Children attending an Antiretroviral Clinic in Northern Nigeria: Perspectives of Caregivers and Care Providers

Authors: Musa S, Umar LW, Abdullahi FL, Taegtemeyer M*, Abdullahi SM, Olorukooba Alfa AM, Usman NH

Department of Paediatrics, Ahmadu Bello University Teaching Hospital (ABUTH), Shika, Zaria, Nigeria

*Liverpool School of Tropical Medicine (LSTM), Pembroke Place, Merseyside, Liverpool, L35QA, United Kingdom

Corresponding Author: Dr Sani Musa, Department of Paediatrics, Ahmadu Bello University Teaching Hospital (ABUTH), Shika, Zaria, Nigeria.

E-mail: asmaummama@gmail.com

Abstract

Background: Nigeria has the highest burden of paediatric HIV infection and the success of control efforts in the country is crucial to the global control of the HIV epidemic. However, defaults from schedules of care poses a threat to paediatric HIV control in Nigeria. This study was conducted in a pioneer facility for the implementation of the National HIV Prevention and Treatment Programmes.

Objective: To explore factors that facilitate adherence to clinic appointments from perspectives of child caregivers and service providers.

Methods: This is a qualitative study using in-depth face-to-face interviews conducted in 2016. Thirty-five participants were purposely sampled to comprise types of caregivers of HIV exposed/infected children receiving care and from categories of service providers. The interviews were audio recorded, transcribed, thematically analysed and presented using a socio-ecological model.

Results: The themes that emerged from participants' narratives included advanced education, affluence and residing close to the clinic at the intrapersonal level. Stable family dynamics and

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3 support, HIV status disclosure and being a biologic parent or grandparent as caregiver emerged
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5 at the interpersonal level. At the community level, disclosure and support were identified, while
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7 at the health facility level positive staff attitude, quality of healthcare as well as peer support
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9 group influence were factors identified to facilitate regular clinic attendance.
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11
12 *Conclusion:* The factors that enable retention of children in care are multidimensional and
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14 intricately connected. Programme improvement initiatives should include regular assessment of
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16 clients' perspectives to inform implementation of strategies that could reinforce caregiver
17
18 confidence in the health system.
19

20
21 **Key words:** *HIV, Exposed, Infected, Children, Adherence, Enablers Antiretroviral, Clinic care,*
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23 *Perspectives, Caregivers, Care providers,*
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25

26 27 28 **Introduction** 29

30
31 Poor retention in HIV care is a worldwide phenomenon and occurs across all the stages of the
32
33 continuum of HIV care. It is however, more common in the paediatric sub-population and in sub-
34
35 Saharan Africa (SSA).¹ The consequences of poor retention include resistance to antiretroviral
36
37 drugs (ARVs), treatment failure and loss of the opportunity for smooth transition from the
38
39 paediatric to adult clinic.²

40
41 In Nigeria, the latest retrospective cohort study on LTFU within the PMTCT care cascade
42
43 showed that 37% of HIV-exposed children were already lost before the first infant visit at four
44
45 weeks after delivery.³ More disturbing is the fact that poor retention has been reported even from
46
47 centres where active tracking of defaulters is carried out⁴, and from resource-rich settings.⁵

48
49 Understanding barriers to retention and addressing them will therefore go a long way in
50
51 ensuring the retention of HIV-infected children within care which will improve the overall child
52
53 survival. In Nigeria, few studies have been conducted to explore the reasons for retention of
54
55 children within HIV care, particularly from the caregivers' perspectives. This is despite the fact
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57 that prior studies outside Nigeria have shown that caregiver's satisfaction is important for
58
59 retention within HIV care.⁶
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Material and Methods

Study design

A qualitative study design was used because It enables exploration of the complex interaction between social structure, behaviour, and culture as well as the factors that underpin them.⁷ The study framework was based on the social ecological model, which defines behaviour as being influenced at different levels.⁸ For the purpose of this study, the reasons for retention will be categorized at the intrapersonal, interpersonal, community, and healthcare system levels, as shown in Figure1 below.

Study Setting and Hospital Guidelines

Zaria has a total population of 406,990 which is predominantly young.⁹ The ancient walled city of Zaria and its immediate surroundings are largely dominated by Muslim and Hausa-Fulani culture. However, outside this place, the presence of many federal institutions, including two military barracks, have drawn people from all walks of life, giving Zaria a cosmopolitan outlook. This has led to the presence of clusters of high-risk areas for the transmission of HIV, as well as a social setting with diverse traditional and cultural beliefs and perceptions.

The study was conducted at the paediatric HIV clinic of ABUTH, Zaria. It has a large catchment area with patients attending from many states in northern Nigeria. A retrospective review of the clinic attendees for a period of eight years (2008-2016) has revealed the total number of children enrolled into the Clinic as 454, with age ranging from zero to 14 years and a male-female ratio of 1.27:1. By the end of December 2016, 239 were lost to-follow-up (LTFU), giving a cumulative LTFU rate of 52.6%.¹⁰

Sample size and sampling

The overall sample size was 38 when saturation was attained. Sampling was Purposive and the study population comprised the different categories of the service providers and caregivers.

Data collection

Data collection was by individual, face-to-face, in-depth interviews. The Calgary-Cambridge framework for physical interviews was utilized. It goes through the stages of creating rapport,

1
2
3 stating the reasons for the interview, conducting the interview, and then concluding with a
4 summary and the opportunity for the interviewee to ask questions.¹¹

5
6 The topic guide was developed deductively, was semi-structured with open ended questions
7 which defined areas of exploration that were then further explored using probes and prompts.
8
9 Two separate topic guides were used, for the caregivers and service providers respectively. They
10 were piloted and further refined iteratively as the data collection progressed. Interviews with
11 caregivers were conducted in the conference room attached to the clinic which is secluded from
12 the consultation areas.

13 14 15 16 17 **Participant recruitment**

18 Caregivers were recruited consecutively as they arrived on their clinic day and the interview was
19 conducted after they had completed the clinic routine. The service providers were notified and
20 given the information sheet about the study three to seven days before the interview date.

21 22 23 24 **Data management and analysis**

25 Thematic analysis was used and the data analysis was conducted with the following steps;

- 26 • Familiarization with the data through reading and, re-reading transcripts and listening to
27 the recorded interviews repeatedly.
- 28 • The coding framework was then formed deductively, through the generation of codes
29 originating from the topic guide, and inductively, through emerging themes.
- 30 • Coding of transcripts was performed manually
- 31 • The data was then charted into thematic matrices and interpreted.

32
33 The generated themes were pooled and integrated into common themes based on which the
34 results were organised.¹²

35 36 37 38 39 40 41 42 43 **Ethics**

44 The approval of the research and ethics committee of ABUTH, Zaria was obtained

45 46 47 **Aim**

48 To explore the enablers to retention in the paediatric HIV clinic of ABUTH, Zaria, Nigeria.

49 50 51 52 53 **Results**

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3 The enablers to retention were categorized at the intrapersonal, interpersonal, community, and
4 health care system levels, as shown in Figure 3.
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10 **Demographic profile of participants**

11 **Enablers to clinic attendance**

12 **Intrapersonal level**

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15 Good health-seeking behaviour of the caregivers emerged as an enabler to retention in clinic.
16 Many participants felt that the understanding of the value of the clinic, and the observed
17 improvement in the health of their children were strong motivating factors.
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21
22 *“The clinic is very important, because, once he starts taking the drugs, [...] he will*
23 *stop falling sick frequently”*
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25

26 Service providers felt that having a biological parent and the grandparents as caregivers is an
27 enabler to clinic attendance as opposed to guardians. They were perceived to be more involved in
28 the care of the child.
29
30

31
32 *“... if they are biologically related to the child like the parents, they tend to be more involved in*
33 *the care of the child, you will be able to discuss a lot of issues with them [...] ...”*
34
35

36 **Interpersonal level**

37
38 Good family dynamics was perceived to be a facilitator to retention in clinic. In the same vein,
39 support from the family both psychological, material, and even bringing the child to the clinic
40 itself emerged as a strong motivator.
41
42

43
44 *“..., my husband supports me a lot, he is negative, but he will bring us (herself and her child) to*
45 *the clinic with his car, park his car, and wait for me for as long as I am in the clinic, and*
46 *afterwards he takes me back home”*
47
48
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50 **Community level**

51 Support from members of the community emerged as a strong reason for retention in clinic.
52 Many of the participants expanded on this to include support such as aiding the caregivers with
53 money for transport, and supporting children, particularly orphans, with food, clothing and so on.
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3 *“Some people in the community use to help with transport money.....”*,
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6 However, the fear of discrimination has hindered the ability of some caregivers to access this
7 support from the members of their community because of stigma.
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9
10 Disclosure to trusted members of the family and community was similarly perceived to be an
11 enabler to clinic attendance.
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13
14 *“It is good if you have somebody you trust to tell him/her about the status of your child because,*
15 *in the event that you die before the person, she/he will be able to take care of your child’s clinic*
16 *requirements”*
17
18

19 **Health care system**

20
21 Locating the clinic away from the main hospital provides privacy, which facilitates clinic
22 attendance. Participants also felt that the cleanliness and spaciousness of the clinic, coupled with
23 air-conditioned consulting rooms, makes attending the clinic comfortable and encourages
24 retention.
25
26

27
28 *“... There is confidentiality...and the rooms are well air conditioned, so the doctor and the*
29 *patient are all comfortable”*
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31

32
33 Positive staff attitude to caregivers emerged as a strong motivator for remaining attached to the
34 clinic. This was perceived by the caregivers as kind words, respect, and politely correcting them
35 when they erred.
36

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38 *“What we love when we bring our children is to be shown sympathy..., perhaps the child is an*
39 *orphan, so when the mother comes, she should be treated kindly, they should not shout at her”*
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43 In addition to giving the ARVs free, other incentives such as breast milk substitutes and
44 mosquito nets emerged as major reasons for retention in the clinic.

45
46 *“In those days when we started newly there were little things they used to give us, things like*
47 *mosquito net, water guard..., I think it can also encourage attendance at the clinic”*
48

49
50 Participants felt that a high standard of care was an important motivator for retention in clinic.
51 Quality was felt to have a range of dimensions, including waiting times, skills and knowledge,
52 availability of support services and a flexible patient-centred approach to care. They cited
53 qualified, professional staff, availability of laboratory services, availability of drugs, and prompt
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3 attention, as reasons for retention. Having integrated services in a clinic and giving the same
4 appointment date for caregivers who are HIV positive and their children were the other enablers
5 that related to the standard of care.
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9 *‘Some prefer to come here regardless of the distance because the services here are better... in*
10 *those other places, they will tell you that they have taken your blood to another place for*
11 *test[ting], but here they do everything and you see your result’*
12
13

14
15 The presence of a peer support group in the clinic for the caregivers was perceived as an enabler
16 for clinic retention. Many participants elaborated on this citing the benefits of the support group
17 such as psychological support, helping to combat stigma, material gains, and finding marital
18 partners.
19

20
21 *“The support group provides them with the opportunity to interact with one another, learn*
22 *vocational skills; some have met new partners, and some have even been employed in the clinic*
23 *here”*
24
25

26
27 Proactive tracking of defaulters by clinic staff was seen as an important reason for retention.
28

29 *“It will help if those that have stopped coming are followed to their homes and counselled, they*
30 *will understand, return and continue to take their drugs”*
31
32

33 Interestingly, false notions surrounding the continuity of free ARVs have made some caregivers
34 regular with their clinic attendance. This was out of the fear that, very soon the drugs will cease
35 to be free and they will have to be buying.
36
37

38 *“I heard that American people say they will stop giving drugs, so I don’t want to stop coming*
39 *to clinic so that the little I have will sustained me before I [have to] start buying when they*
40 *stop [being free]*
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44 **Discussion**

45
46 Incentives given at the clinic such as transport money and food emerged as a strong enabler to
47 retention. This is consistent with the finding from Kinshasa in the Democratic Republic of
48 Congo, where conditional cash transfers increased retention in clinic within the PMTCT
49 programme by 7.8 %.¹³ This has also been corroborated in a systematic review on improving
50 linkage and retention in HIV care.¹⁴
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3 Good relationship between a caregiver and her/his spouse was found to be an important reason
4 for retention in clinic. This echoes the finding from the latest qualitative synthetic review on the
5 reasons for retention in SSA. The review showed that a good relationship between a couple leads
6 to social normalization with the HIV situation and improved clinic retention.¹⁵
7
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9
10 The larger family support, including support from siblings, was found to be important in
11 ensuring retention to care. This agrees with the American Academy of Paediatrician's definition
12 of the family as the primary source of strength and support for the child.¹⁶ It is also consistent
13 with a study in South Africa.¹⁷ It was therefore not surprising that disclosure of the status of the
14 child to close family members and a trusted few in the community was found to be an important
15 enabler to retention in care. This was similarly reported from five HIV care centres across
16 Nigeria¹⁸, and from across the West African sub-region.¹⁹
17

18 Parent and grandparent caregivers were associated with better retention. this could be related to
19 the fact that the orphans have the added vulnerability of missing parental support. Studies have
20 shown the retention of HIV-infected orphans to be worse than that of the children whose parents
21 are still alive.²⁰
22

23 Support from the wider members of the community was found to be an important enabler
24 to retention, consistent with the findings from Ethiopia²¹ and Zimbabwe.²² Nonetheless, the
25 availability of the support to the caregivers was limited by perceived stigma in the community.
26 This is consistent with the findings from Ethiopia.²¹
27

28 The study found that a clean, spacious, well-ventilated clinic, with recreational facilities was a
29 reason for retention in the clinic, as substantiated in the literature.²³ Friendly staff attitude to
30 caregivers was found to be a strong facilitator to retention as was found in Tanzania.²⁴
31

32 Tracking of defaulter's increases retention partly because it encourages re-engagement,
33 and because some clients prefer to come to the clinic to avoid being traced via home visits for
34 fear of disclosure of their status. This agrees with the study in Kenya.²⁵ The study additionally
35 found that the caregiver support group in the hospital was a reason for retention, as was also
36 found in Vietnam.²⁶
37
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39 40 41 42 43 44 45 46 47 48 49 50 51 52 Conclusion and Recommendations

- 53 1. Quality improvement initiatives in the clinic should ensure a periodic and systematic
54 capture of caregiver and patient perspectives on quality.
55
56

2. The clinic managers could consider introducing incentives such as transport fares generally, and specifically identifying and assisting the orphans.

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Department of Paediatrics, Ahmadu Bello University Teaching Hospital (ABUTH), Shika, Zaria, Nigeria

*Liverpool School of Tropical Medicine (LSTM), Pembroke Place, Merseyside, Liverpool, L35QA, United Kingdom

Corresponding Author: Dr Sani Musa, Department of Paediatrics, Ahmadu Bello University Teaching Hospital (ABUTH), Shika, Zaria, Nigeria.

E-mail: asmaummama@gmail.com

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In Nigeria, the latest retrospective cohort study on LTFU within the PMTCT care cascade showed that 37% of HIV-exposed children were already lost before the first infant visit at four weeks after delivery.³ More disturbing is the fact that poor retention has been reported even from centres where active tracking of defaulters is carried out⁴, and from resource-rich settings.⁵

Understanding barriers to retention and addressing them will therefore go a long way in ensuring the retention of HIV-infected children within care which will improve the overall child survival. In Nigeria, few studies have been conducted to explore the reasons for retention of children within HIV care, particularly from the caregivers' perspectives. This is despite the fact that prior studies outside Nigeria have shown that caregiver's satisfaction is important for retention within HIV care.⁶

Material and Methods

Study design

A qualitative study design was used because It enables exploration of the complex interaction between social structure, behaviour, and culture as well as the factors that underpin them.⁷ The study framework was based on the social ecological model, which defines behaviour as being influenced at different levels.⁸ For the purpose of this study, the reasons for retention will be categorized at the intrapersonal, interpersonal, community, and healthcare system levels, as shown in Figure1 below.

Study Setting and Hospital Guidelines

Zaria has a total population of 406,990 which is predominantly young.⁹ The ancient walled city of Zaria and its immediate surroundings are largely dominated by Muslim and Hausa-Fulani culture. However, outside this place, the presence of many federal institutions, including two military barracks, have drawn people from all walks of life, giving Zaria a cosmopolitan outlook. This has led to the presence of clusters of high-risk areas for the transmission of HIV, as well as a social setting with diverse traditional and cultural beliefs and perceptions.

The study was conducted at the paediatric HIV clinic of ABUTH, Zaria. It has a large catchment area with patients attending from many states in northern Nigeria. A retrospective review of the clinic attendees for a period of eight years (2008-2016) has revealed the total number of children enrolled into the Clinic as 454, with age ranging from zero to 14 years and a male-female ratio of 1.27:1. By the end of December 2016, 239 were lost to-follow-up (LTFU), giving a cumulative LTFU rate of 52.6%.¹⁰

Sample size and sampling

The overall sample size was 38 when saturation was attained. Sampling was Purposive and the study population comprised the different categories of the service providers and caregivers.

Data collection

Data collection was by individual, face-to-face, in-depth interviews. The Calgary-Cambridge framework for physical interviews was utilized. It goes through the stages of creating rapport,

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3 stating the reasons for the interview, conducting the interview, and then concluding with a
4 summary and the opportunity for the interviewee to ask questions.¹¹

5
6 The topic guide was developed deductively, was semi-structured with open ended questions which
7 defined areas of exploration that were then further explored using probes and prompts. Two
8 separate topic guides were used, for the caregivers and service providers respectively. They were
9 piloted and further refined iteratively as the data collection progressed. Interviews with caregivers
10 were conducted in the conference room attached to the clinic which is secluded from the
11 consultation areas.
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17 **Participant recruitment**

18 Caregivers were recruited consecutively as they arrived on their clinic day and the interview was
19 conducted after they had completed the clinic routine. The service providers were notified and
20 given the information sheet about the study three to seven days before the interview date.
21
22
23

24 **Data management and analysis**

25 Thematic analysis was used and the data analysis was conducted with the following steps;
26

- 27 • Familiarization with the data through reading and, re-reading transcripts and listening to
28 the recorded interviews repeatedly.
- 29 • The coding framework was then formed deductively, through the generation of codes
30 originating from the topic guide, and inductively, through emerging themes.
- 31 • Coding of transcripts was performed manually
- 32 • The data was then charted into thematic matrices and interpreted.

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38 The generated themes were pooled and integrated into common themes based on which the
39 results were organised.¹²
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41
42

43 **Ethics**

44
45 The approval of the research and ethics committee of ABUTH, Zaria was obtained
46

47 **Aim**

48 To explore the enablers to retention in the paediatric HIV clinic of ABUTH, Zaria, Nigeria.
49
50

51 **Results**

1
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3 The enablers to retention were categorized at the intrapersonal, interpersonal, community, and
4 health care system levels, as shown in Figure 3.
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10 **Demographic profile of participants**

11 **Enablers to clinic attendance**

12 **Intrapersonal level**

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16 Good health-seeking behaviour of the caregivers emerged as an enabler to retention in clinic. Many
17 participants felt that the understanding of the value of the clinic, and the observed improvement in
18 the health of their children were strong motivating factors.
19
20

21
22 *“The clinic is very important, because, once he starts taking the drugs, [...] he will*
23 *stop falling sick frequently”*
24
25

26 Service providers felt that having a biological parent and the grandparents as caregivers is an
27 enabler to clinic attendance as opposed to guardians. They were perceived to be more involved in
28 the care of the child.
29
30

31
32 *“... if they are biologically related to the child like the parents, they tend to be more involved in*
33 *the care of the child, you will be able to discuss a lot of issues with them [...] ...”*
34
35

36 **Interpersonal level**

37
38 Good family dynamics was perceived to be a facilitator to retention in clinic. In the same vein,
39 support from the family both psychological, material, and even bringing the child to the clinic
40 itself emerged as a strong motivator.
41
42

43
44 *“..., my husband supports me a lot, he is negative, but he will bring us (herself and her child) to*
45 *the clinic with his car, park his car, and wait for me for as long as I am in the clinic, and*
46 *afterwards he takes me back home”*
47
48
49

50 **Community level**

51 Support from members of the community emerged as a strong reason for retention in clinic. Many
52 of the participants expanded on this to include support such as aiding the caregivers with money
53 for transport, and supporting children, particularly orphans, with food, clothing and so on.
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1
2
3 “Some people in the community use to help with transport money.....”,
4

5
6 However, the fear of discrimination has hindered the ability of some caregivers to access this
7
8 support from the members of their community because of stigma.
9

10 Disclosure to trusted members of the family and community was similarly perceived to be an
11 enabler to clinic attendance.
12

13
14 “It is good if you have somebody you trust to tell him/her about the status of your child because,
15 in the event that you die before the person, she/he will be able to take care of your child’s clinic
16 requirements”
17
18

19 **Health care system**

20
21 Locating the clinic away from the main hospital provides privacy, which facilitates clinic
22 attendance. Participants also felt that the cleanliness and spaciousness of the clinic, coupled with
23 air-conditioned consulting rooms, makes attending the clinic comfortable and encourages
24 retention.
25
26

27
28 “... There is confidentiality...and the rooms are well air conditioned, so the doctor and the
29 patient are all comfortable”
30
31

32
33 Positive staff attitude to caregivers emerged as a strong motivator for remaining attached to the
34 clinic. This was perceived by the caregivers as kind words, respect, and politely correcting them
35 when they erred.
36

37
38 “What we love when we bring our children is to be shown sympathy..., perhaps the child is an
39 orphan, so when the mother comes, she should be treated kindly, they should not shout at her”
40
41

42 In addition to giving the ARVs free, other incentives such as breast milk substitutes and mosquito
43 nets emerged as major reasons for retention in the clinic.
44

45
46 “In those days when we started newly there were little things they used to give us, things like
47 mosquito net, water guard..., I think it can also encourage attendance at the clinic”
48

49 Participants felt that a high standard of care was an important motivator for retention in clinic.
50 Quality was felt to have a range of dimensions, including waiting times, skills and knowledge,
51 availability of support services and a flexible patient-centred approach to care. They cited
52 qualified, professional staff, availability of laboratory services, availability of drugs, and prompt
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3 attention, as reasons for retention. Having integrated services in a clinic and giving the same
4 appointment date for caregivers who are HIV positive and their children were the other enablers
5 that related to the standard of care.
6
7

8
9 *‘Some prefer to come here regardless of the distance because the services here are better... in*
10 *those other places, they will tell you that they have taken your blood to another place for*
11 *test[ting], but here they do everything and you see your result’*
12
13

14
15 The presence of a peer support group in the clinic for the caregivers was perceived as an enabler
16 for clinic retention. Many participants elaborated on this citing the benefits of the support group
17 such as psychological support, helping to combat stigma, material gains, and finding marital
18 partners.
19

20
21 *“The support group provides them with the opportunity to interact with one another, learn*
22 *vocational skills; some have met new partners, and some have even been employed in the clinic*
23 *here”*
24
25

26
27 Proactive tracking of defaulters by clinic staff was seen as an important reason for retention.
28

29 *“It will help if those that have stopped coming are followed to their homes and counselled, they*
30 *will understand, return and continue to take their drugs”*
31
32

33
34 Interestingly, false notions surrounding the continuity of free ARVs have made some caregivers
35 regular with their clinic attendance. This was out of the fear that, very soon the drugs will cease to
36 be free and they will have to be buying.
37

38
39 *“I heard that American people say they will stop giving drugs, so I don’t want to stop coming*
40 *to clinic so that the little I have will sustained me before I [have to] start buying when they*
41 *stop [being free]*
42
43

44 **Discussion**

45
46 Incentives given at the clinic such as transport money and food emerged as a strong enabler to
47 retention. This is consistent with the finding from Kinshasa in the Democratic Republic of Congo,
48 where conditional cash transfers increased retention in clinic within the PMTCT programme by
49 7.8 %.¹³ This has also been corroborated in a systematic review on improving linkage and retention
50 in HIV care.¹⁴
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3 Good relationship between a caregiver and her/his spouse was found to be an important reason for
4 retention in clinic. This echoes the finding from the latest qualitative synthetic review on the
5 reasons for retention in SSA. The review showed that a good relationship between a couple leads
6 to social normalization with the HIV situation and improved clinic retention.¹⁵
7
8

9
10 The larger family support, including support from siblings, was found to be important in
11 ensuring retention to care. This agrees with the American Academy of Paediatrician's definition
12 of the family as the primary source of strength and support for the child.¹⁶ It is also consistent with
13 a study in South Africa.¹⁷ It was therefore not surprising that disclosure of the status of the child
14 to close family members and a trusted few in the community was found to be an important enabler
15 to retention in care. This was similarly reported from five HIV care centres across Nigeria¹⁸, and
16 from across the West African sub-region.¹⁹
17

18 Parent and grandparent caregivers were associated with better retention. this could be related to
19 the fact that the orphans have the added vulnerability of missing parental support. Studies have
20 shown the retention of HIV-infected orphans to be worse than that of the children whose parents
21 are still alive.²⁰
22

23 Support from the wider members of the community was found to be an important enabler
24 to retention, consistent with the findings from Ethiopia²¹ and Zimbabwe.²² Nonetheless, the
25 availability of the support to the caregivers was limited by perceived stigma in the community.
26 This is consistent with the findings from Ethiopia.²¹
27

28 The study found that a clean, spacious, well-ventilated clinic, with recreational facilities was a
29 reason for retention in the clinic, as substantiated in the literature.²³ Friendly staff attitude to
30 caregivers was found to be a strong facilitator to retention as was found in Tanzania.²⁴
31

32 Tracking of defaulter's increases retention partly because it encourages re-engagement, and
33 because some clients prefer to come to the clinic to avoid being traced via home visits for fear of
34 disclosure of their status. This agrees with the study in Kenya.²⁵ The study additionally found that
35 the caregiver support group in the hospital was a reason for retention, as was also found in
36 Vietnam.²⁶
37

38 Conclusion and Recommendations

- 39 1. Quality improvement initiatives in the clinic should ensure a periodic and systematic
40 capture of caregiver and patient perspectives on quality.
41

2. The clinic managers could consider introducing incentives such as transport fares generally, and specifically identifying and assisting the orphans.

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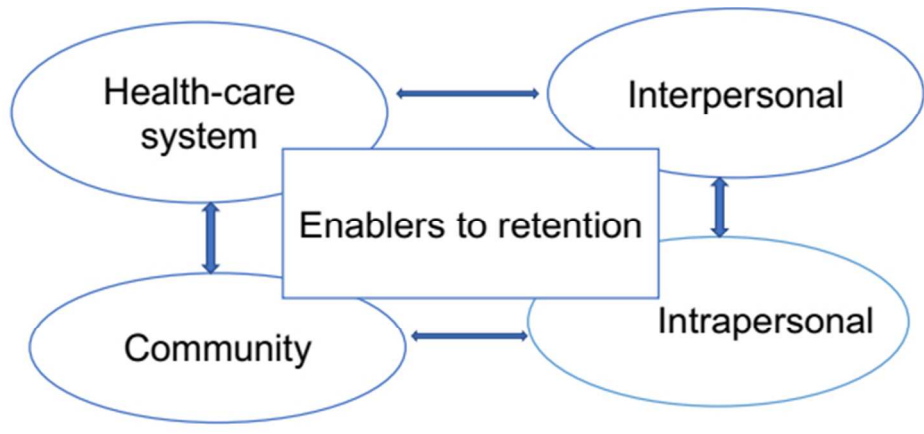


Figure 1: The socio-ecological modelling of the reasons for retention and LTFU

Peer Review

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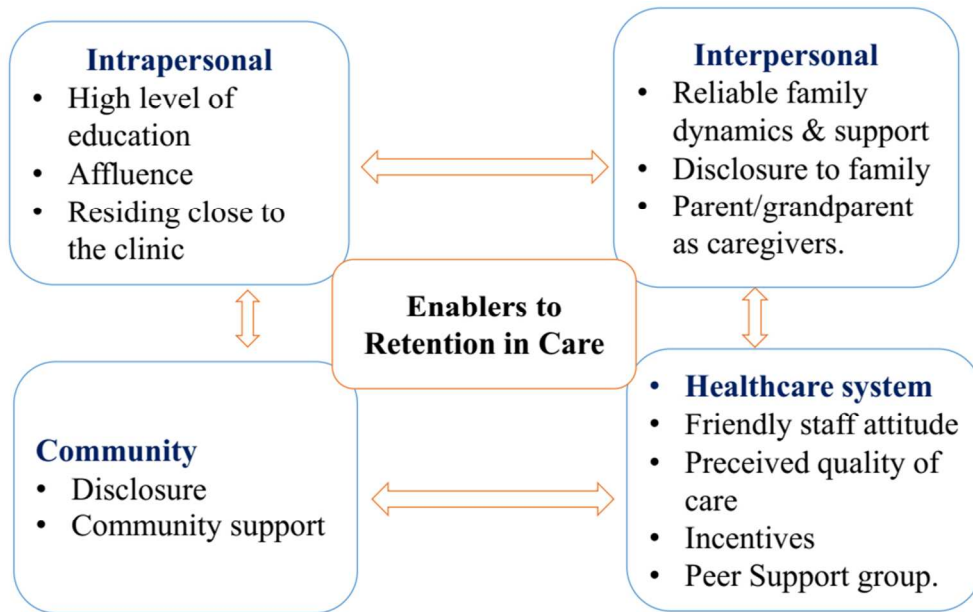


Figure 2: Structure of the themes underlying retention in clinic

Healthcare participants	Caregiver participants
2 consultants	4 male caregivers
2 senior residents	1 unaccompanied adolescents
2 junior residents	2 caregivers of orphans
2 nurses	2 secondary caregivers
3 record staff, & members of tracking team	4 caregivers of children less than 18 months
1 administrator in-charge of PMTCT	6 caregivers of children under the age of five
1 pharmacist	2 caregivers of children five to 15 years old
1 data entry staff	
1 cleaner	
1 security agent	
1 support worker	

Table 1: Sampling matrix for service providers

Characteristic	No.	%
Age bracket		
<30	2	11.1
30-40	7	38.9
41-50	6	33.3
51-60	3	16.7
Sex		
Male	4	22.2
Female	14	77.8
Education		
Informal	4	22.2
Primary	6	33.3
Secondary	4	22.2
University	1	11.1
Diploma	3	16.7
Relationship to child		
Father	4	22.2
Mother	11	44.5
Aunt	1	5.6
Grandmother	1	5.6
Self	1	5.6

Table 2: Demographic profile of caregivers

Table II: Characteristics of Service providers

Characteristic		Number	Percentage (%)
Sex	Male	7	41
	Female	10	59
Cadre	Consultants	2	12
	Residents	2	12
	Nurses	4	22
	Trackers	1	6
	Record staff	2	12
	Administrator	1	6
	Pharmacist	1	6
	Data manager	1	6
	Cleaner	1	6
	Security	1	6
Support worker	1	6	

Table 3: profile of service providers