

Community-led interventions to re-engage people living with HIV into care in Pakistan

Shaimaa Elsfoury¹, Bridget Mugisa¹, Muhammad S Pasha², Asghar Satti³, Omer Haider³, Uzair Tariq³, Ahmed S. Alaama¹, Muhammad S Jamil¹, Yvan Hutin¹ and Joumana Hermez¹

¹Department of Communicable Diseases Prevention and Control, World Health Organization Regional Office for the Eastern Mediterranean, Cairo, Egypt (Correspondence to S. Elsfoury: elsfourys@who.int). ²World Health Organization, Pakistan Country Office, Islamabad, Pakistan. ³Association of People Living with HIV, Islamabad, Pakistan.

Abstract

Background: By 2021, Pakistan had an estimated 210 000 people living with HIV (PLHIV), and 27% of those initiated into treatment in 2020 had disengaged from care within one year.

Aim: We assessed the effectiveness of an intervention to re-engage PLHIV lost to follow-up into care in Pakistan.

Methods: Between September 2020 and May 2021, the Association of People Living with HIV (APLHIV) implemented a search and rescue intervention for PLHIV lost to follow-up in 2 large treatment centres in Pakistan. The centre staff reviewed records to identify those not in care for > 6 months and from September 2020 to May 2021, the APLHIV tracked them through telephone calls and home visits to re-engage them into care. We used SAS version 9.4 to analyse the data and univariate logistic regression to identify factors associated with disengagement and becoming untraceable.

Results: Among the 4184 PLHIV registered (74% male), 36% (1517) (83.9% male, 15.4% female, 0.7% transgender) had disengaged from care. APLHIV members tracked 696 (46%) of them; 295 (42%) were deceased and 325 (47%) were re-engaged into care. Reasons for disengagement were long distance from the ART centre or lack of resources (45%), injecting drug use (19%), adverse effects of antiretroviral therapy (9%), disinformation (9%), no male family member to accompany them to treatment centre after the death of husband (3%), and no reason given (15%). Injecting drug users and males were more likely to be lost to follow-up, and males were more likely to be untraceable.

Conclusion: This community-led intervention successfully re-engaged many PLHIV into care. The community-led re-engagement intervention should be upscaled to reduce loss to care and follow-up in Pakistan, especially among injecting drug users and male PLHIV.

Citation: Elsfoury S, Mugisa B, Pasha MS, Satti A, Haider O, Tariq U, et al. Community-led interventions to re-engage people living with HIV into care in Pakistan. *East Mediterr Health J.* 2024;30(9):603–611. <https://doi.org/10.26719/2024.30.9.603>.

Received: 01/06/2023; Accepted: 16/05/2024

Copyright © Authors 2024; Licensee: World Health Organization. EMHJ is an open access journal. This paper is available under the Creative Commons Attribution Non-Commercial ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO); <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>.

Introduction

UNAIDS estimated that, in 2021, there were 38.4 million people living with HIV (PLHIV) worldwide (1). Between 2011 and 2021, the number of new HIV infections and deaths decreased to 1.5 million and 650 000, respectively (1). Globally, in 2020, 85% of PLHIV knew their status and 88% were receiving treatment (1). In the WHO Eastern Mediterranean Region, prevention, diagnosis and treatment are lower than at global levels (2). UNAIDS estimated that in 2021, there were 430 000 PLHIV in the Eastern Mediterranean Region (1). Only 41% of these PLHIV knew their status and 27% were on antiretroviral therapy (ART). In the same year, UNAIDS estimated that there were 42 000 new HIV infections and 19 000 HIV-related deaths.

Unlike the global trend, the HIV epidemic in Pakistan is continuously increasing, particularly among injecting drug users, men who have sex with men, and transgender people (1). In 2021, UNAIDS estimated that there were 210 000 PLHIV (1), and in 2020, there were 25 000 new infections in the country (3). There has been slow progress in the HIV response, attributed to low case finding and low retention of

those initiated on treatment (2,4,5). By the end of 2021, only 23% of PLHIV were aware of their status and 14% were receiving treatment (1). In 2020, a treatment outcome study in Pakistan showed that more than one-third of patients who started on treatment did not return for the second month visit and only a quarter of patients were retained in care by 12 months (2). In 2020, the COVID-19 pandemic exacerbated treatment disengagement among PLHIV: 26.7% of 990 who initiated ART in 2020 were lost to follow-up by the end of 2020 (unpublished Ministry of Health report). This excessive loss of individuals from care prompted the need for a “search and rescue” initiative as an emergency operation to re-engage on ART PLHIV who had dropped out of care. We evaluated the search and rescue intervention in terms of its effectiveness in re-engaging PLHIV into care.

Methods

Study design and setting

This novel community-led approach located, counselled and assisted PLHIV who were lost to follow-up to return to

care. The intervention adopted the WHO-recommended principles of using peer-led models to improve treatment outcomes and retention (6). It complied with the new clinical and service delivery guidelines of WHO on interventions to track people who have disengaged from care and to provide support for re-engagement into care (7). The search and rescue initiative used peers to track individuals who were reported as lost to follow-up, with up to 3 attempts, to contact them and encourage them to return to care. We documented the outcomes, including the reasons for disengagement, and compared the demographics and population types with those of the living individuals who had been registered in care and active on HIV treatment.

The Association of People Living with HIV/AIDS (APLHIV) implemented the intervention from 1 September 2020 to 30 May 2021 in the 2 antiretroviral treatment (ART) centres with the largest number of patients on treatment in Pakistan: the Pakistan Institute of Medical Sciences in Islamabad, and the Hayatabad Medical Complex in the Khyber Pakhtunkhwa Province.

Ethics considerations

APLHIV used peers to contact PLHIV who were reported as lost to follow-up. APLHIV trained their peer trackers on the key principles of the interventions including: (1) dignity and respect for the client's choices as overarching principles; (2) exercising caution not to breach the patient's confidentiality while tracking; (3) the right of PLHIV to verbally consent to participate in the intervention, based on informed choice while being provided with facilitation; and (4) completion of all study procedures without coercion. Verbal consent was obtained from all the participants. Every client had the right to accept or reject the intervention. If PLHIV refused to consent, they were not recorded in the tracking log and not included in data analysis. Peer trackers recorded the outcome of the intervention on the tracking log anonymously, using a unique ART identification code. The data analysts reviewed and analysed the data using a version of the database that did not have personal identification data and used unique identification codes to link the complete list of PLHIV and the loss to follow-up tracking tool.

This study evaluated a programme intervention implemented as part of routine programme implementation. We used secondary data from the national AIDS programme from Pakistan. Therefore, it was deemed unnecessary to obtain institutional ethics approval. It was also not eligible for ethics committee review as per WHO and national requirements (8).

Definitions

According to the Pakistan National AIDS Programme guidelines, an individual is considered lost to follow-up if they have not presented to care for 6 months since their last scheduled appointment or drug pick-up date. Individuals re-engaged into care include those who were previously lost to follow-up but have reported back to the ART centre and re-initiated into treatment. Individuals

on silent transfer include those on treatment who have registered and continue their treatment in another facility.

Intervention

From 1 September 2020 to 30 May 2021, an intervention team of PLHIV peers comprising a tracking coordinator, peer trackers, data entry officers and the national management information system coordinator. Once the data from the national management information system were received, the team reviewed the records of patients registered at the 2 ART centres between 5 October 2013 and 30 December 2019. The records included the status of the patients (alive/deceased) and their ART status (pre-ART, on ART and lost to follow-up). The APLHIV tracking team listed all PLHIV identified as lost to follow-up, excluding those already confirmed as deceased. The tracking coordinator grouped the list of individuals geographically, and assigned 3–5 PLHIV, at a time, to a peer tracker for field tracking.

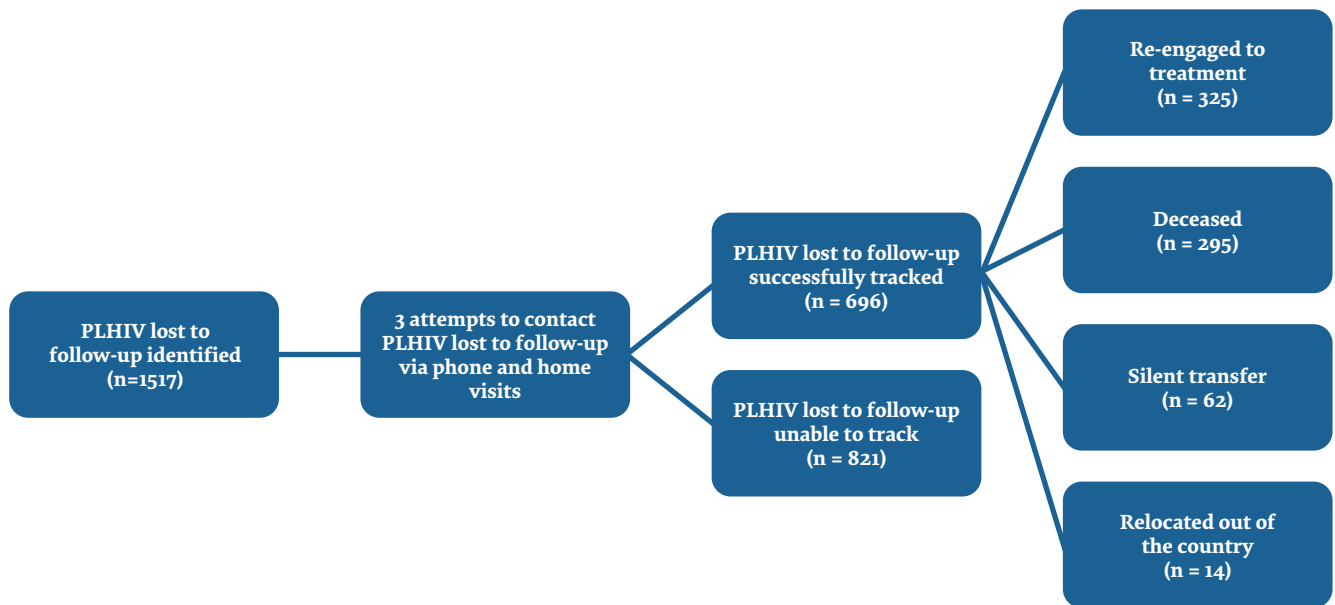
Peer trackers reviewed the location of the PLHIV and identified potential informants among community members. After the peer trackers had identified the home or contact details for 1517 PLHIV lost to follow-up, they made at least 3 attempts to contact the individuals through telephone or home visit (Figure 1). The peer trackers counselled and encouraged each contacted patient to return to care. For PLHIV who had relocated out of the country or individuals reported as deceased, a close acquaintance of the patient served as an informant. The peer trackers used a spreadsheet-based data collection form (tracking log), which included the name of the ART centre, unique ART identification code, gender, date of birth, whether ART ever initiated, ART start date, date of last visit, date of first contact for re-engagement into care, the reason for loss to follow-up, and date of resumed ART visit. Among the 696 PLHIV who were successfully tracked, the peer trackers documented the final outcome as: (1) re-engaged into care at the same centre ($n = 325$); (2) silent transfer ($n = 62$); (3) relocated out of the country ($n = 14$); or (4) deceased ($n = 295$). The tracking coordinator along with peer trackers ascertained the outcome of the intervention and informed the national management information system coordinator to update the status of the PLHIV in the national database at weekly meetings.

If the PLHIV refused to consent, they were not recorded in the tracking log and not included in the data analysis. Peer trackers recorded the outcome of the intervention on the tracking log anonymously, using a unique ART identification code.

Data analysis

The data analysts reviewed and analysed data using a version of the database that had no personal identification data and used unique identification codes to link the complete list of PLHIV with the lost to follow-up tracking tool. The main study variables included ART centre, gender, population group and treatment category. We divided the dataset into 2 main centres: Pakistan

Figure 1. Process and outcomes of search and rescue intervention, Pakistan Institute of Medical Sciences, and Hayatabad Medical Complex, Pakistan, 2020–2021



PLHIV = people living with HIV

Institute of Medical Sciences and Hayatabad Medical Centre as a reference. We categorized gender into 3 groups: male, transgender, with female as the reference. We categorized population group as injecting drug users, men having sex with men, transgender including transgender sex workers, migrants, and male and female sex workers, with the general population used as a reference. Treatment stage included pretreatment and on treatment.

We described the sociodemographic characteristics of PLHIV active on treatment and those lost to follow-up at the Pakistan Institute of Medical Sciences and Hayatabad Medical Centre. We analysed the outcome of the intervention among PLHIV who were successfully tracked and recorded the reasons for disengagement from treatment. We compared the characteristics of those lost to follow-up with those still in care in terms of gender, population group and treatment centre, using univariate logistic regression. Among individuals lost to follow-up, we compared those who were not tracked with those successfully tracked in terms of gender, population group, and centres using univariate logistic regression. We used SAS version 9.4 to conduct the data analyses and set the significance level at 0.05.

Results

Description of the population

There were 4184 PLHIV registered on treatment at Pakistan Institute of Medical Sciences (44.2%) and Hayatabad Medical Centre (55.8%) (Table 1). Among the registered PLHIV, 74.4% were male, 24.4% female and 1.2% transgender. In relation to population group, 76% were from the general population, 15.5% were injecting drug users, 6.0% were migrants and 2.5% were from other groups. There were 1517 (36.3%) PLHIV reported as lost to follow-up: 83.9% were male, 15.4% female and 0.7% transgender, and 43.1% were registered at the Pakistan Institute of Medical Sciences and 56.9% at Hayatabad Medical Centre. Most of the lost-to-follow-up population were from the general population (70%), followed by (26.9%) and other groups (3.1%).

Description of PLHIV successfully tracked

The intervention successfully tracked 45.9% of PLHIV lost to follow-up and documented their outcomes (Table 1). Among those registered at the Pakistan Institute of Medical Sciences, 35% were tracked, compared with 54.1% at Hayatabad Medical Centre. Among the male PLHIV

Table 1. People living with HIV and lost to follow-up, Pakistan Institute of Medical Sciences, and Hayatabad Medical Complex, 2020–2021

Categories	People living with HIV			People lost to follow-up		
	Total (%)	In care (%)	Lost to follow-up (%)	Total (%)	Tracked (%)	Untracked (%)
Centre name						
Pakistan Institute of Medical Sciences	1850 (44.2)	1196 (64.7)	654 (35.5)	654 (43.1)	229 (35)	425 (65)
Hayatabad Medical Complex	2334 (55.7)	1471 (63.0)	863 (37.0)	863 (56.9)	467 (54.1)	396 (45.9)
Gender						
Female	1022 (24.4)	788 (77.1)	234 (22.9)	234 (15.4)	135 (57.7)	99 (42.3)
Male	3113 (74.4)	1841 (59.1)	1272 (40.9)	1272 (83.9)	558 (43.9)	714 (56.1)
Transgender (incl. sex workers)	49 (1.2)	38 (77.6)	11 (22.5)	11 (0.7)	3 (27.3)	8 (72.7)
Population group						
General population	3181 (76.0)	2150 (67.6)	1031 (32.3)	1031 (70.0)	490 (47.5)	541 (52.5)
Injecting drug users	649 (15.5)	241 (37.1)	408 (61.7)	408 (26.9)	167 (40.9)	241 (59.1)
Men who have sex with men	14 (0.3)	11 (78.6)	3 (21.4)	3 (0.2)	2 (66.7)	1 (33.3)
Transgender (incl. sex workers)	49 (1.2)	37 (75.5)	12 (24.5)	12 (0.8)	3 (25)	9 (75)
Migrants	254 (6.0)	203 (79.9)	51 (20.1)	51 (3.4)	29 (56.9)	22 (43.1)
Sex workers (male and female)	36 (0.9)	24 (66.7)	12 (33.3)	12 (0.8)	5 (41.7)	7 (58.3)
Partners of key populations	1 (0.2)	1 (100.0)	0 (0)	0 (0)	0 (0)	0 (0)
Pretreatment	71 (1.7)	0 (0)	71 (100.0)	71 (4.6)	37 (52.1)	34 (47.9)
Treatment stage						
On treatment	4136 (98.3)	2690 (65.0)	1446 (35.0)	1446 (95.3)	659 (45.6)	787 (54.4)
Total	4184	2667 (63.7)	1517 (36.3)	1517	696 (45.9)	821 (54.1)

who were lost to follow-up, 43.9% were tracked. Among the PLHIV in the general population who were lost to follow-up, 47.5% were tracked.

The intervention re-engaged to treatment 46.7% of PLHIV who were successfully tracked, and revealed that 42.4% had died (Table 2). A minority had been transferred to other ART centres (8.9%) or relocated out of the country (2.0%). The majority of tracked males were either re-engaged into care (45.2%) or deceased (44.6%). Among the general population, 42.2% were re-engaged into care and 45.0% had died. Among injecting drug users, 56.3% were re-engaged into care and 38.9% had died. One of the 2 men who have sex with men and 1 of the 3 transgender people had died.

Reasons for disengagement from treatment

The reasons for disengagement from care was reported by 403 PLHIV who were lost to follow-up: 183 (45%) stated long distance from the ART centre or lack of resources; 77 (19%) stopped treatment because of injection drug use; and 36 (9%) due to ART adverse effects. Disinformation such as inaccurate briefing from quacks and religious healers, as well as lack of information on the need for lifelong treatment accounted for almost 9% (n = 36) of loss to follow-up. Fourteen (3%) women stopped treatment because no male family member was available or willing to accompany them to receive treatment after the death of their husband.

Factors associated with loss to follow-up or becoming untraceable

Compared with PLHIV who were in care, people who injecting drug users [odds ratio (OR) = 3.5, 95% confidence interval (CI): 3.0–4.2] and males (OR = 2.3, 95% CI: 2.0–2.7) were more likely to be reported as lost to follow-up (Table 3). Injecting drug users (OR = 1.3, 95% CI: 1.0–1.6), males (OR = 1.7, 95% CI: 1.3–2.3) and people registered at Pakistan Institute of Medical Sciences (OR = 2.2, 95% CI: 1.8–2.7) were more likely to be untraceable during the intervention (Table 4).

Discussion

Our novel peer-led intervention was effective in identifying, tracking and re-engaging into care PLHIV in Pakistan who were lost to follow-up. These findings are comparable with a previous study which showed that interventions were successful in re-engaging 39% of tracked PLHIV with their original clinic (9). Our intervention highlights the need for greater focus in future interventions on males and injecting drug users, given the greater likelihood for loss to follow-up. The role of peers in such interventions is paramount, in addition to effective counselling and consistent strategies. Despite the success, some barriers remain, including the lack of differentiated service delivery, inadequate

Table 2. Outcome of people living with HIV lost to follow-up successfully tracked, Pakistan Institute of Medical Sciences, and Hayatabad Medical Complex, 2020–2021

Categories	Re-engaged in treatment No. (%)	Deceased No. (%)	Silent transfer No. (%)	Relocated out of country No. (%)	Total
Centre name					
Pakistan Institute of Medical Sciences	107 (46.70)	81 (35.40)	29 (12.70)	12 (5.24)	229
Hayatabad Medical Complex	218 (46.70)	214 (45.80)	33 (7.10)	2 (0.43)	467
Gender					
Female	71 (52.60)	45 (33.30)	13 (9.60)	6 (4.40)	135
Male	252 (45.20)	249 (44.60)	49 (8.80)	8 (1.40)	558
Transgender (incl. sex workers)	2 (66.70)	1 (33.30)	0 (0)	0 (0)	3
Population group					
General population	207 (42.20)	219 (45.0)	52 (10.60)	12 (2.50)	490
Injecting drug users	94 (56.30)	65 (38.90)	8 (4.80)	0 (0)	167
Men who have sex with men	0 (0)	1 (50.0)	0 (0)	1 (50.0)	2
Transgender (incl. sex workers)	2 (66.70)	1 (33.30)	0 (0)	0 (0)	3
Migrant	18 (62.10)	9 (31.0)	1 (3.45)	1 (3.45)	29
Sex workers (male and female)	4 (80.0)	0 (0)	1 (20.0)	0 (0)	5
Total	325 (46.70)	295 (42.40)	62 (8.90)	14 (2.0)	696

Table 3. Outcome of people living with HIV lost to follow-up successfully tracked, Pakistan Institute of Medical Sciences, and Hayatabad Medical Complex, 2020–2021

Characteristics	OR for lost to follow-up (95% CI)
Population group (ref = general population)	
Injecting drug users	3.50 (3.0–4.20)
Men who have sex with men	0.57 (0.16–2.0)
Transgender (incl. transgender sex workers)	0.68 (0.35–1.30)
Migrants	0.52 (0.38–0.72)
Sex workers	1.0 (0.52–2.10)
Gender (ref = females)	
Males	2.3 (2.0–2.70)
Transgender (incl. transgender sex workers)	1.0 (0.5–1.90)
Centre name (ref = Hayatabad Medical Complex)	
Pakistan Institute of Medical Sciences	0.96 (0.88–1.0)

CI = confidence interval; OR = odds ratio

Table 4. Factors associated with inability to trace people living with HIV lost to follow-up, Pakistan Institute of Medical Sciences, and Hayatabad Medical Complex, 2020–2021

Characteristics	OR for lost to follow-up (95% CI)
Population group (ref = general population)	
Injecting drug users	1.30 (1.0–1.70)
Men who have sex with men	0.45 (0.0–5.0)
Transgender (incl. transgender sex workers)	2.70 (0.73–10.0)
Migrants	0.69 (0.40–1.20)
Sex workers	1.30 (0.40–4.02)
Gender (ref = females)	
Males	1.80 (1.30–2.30)
Transgender (incl. transgender sex workers)	3.60 (0.90–14.0)
Centre name (ref = Hayatabad Medical Complex)	
Pakistan Institute of Medical Sciences	2.20 (1.80–2.70)

CI = confidence interval; OR = odds ratio.

communication, insufficient systematic community follow-up, and poor quality of patient counselling.

Gender and injecting drug use played a significant role in the outcome disparities. Males were more likely to be lost to follow-up and untracked, as in previous studies (10–13). Those studies reported that males have lower survival rates, higher disengagement from care, and higher risk of death than females (10–12). A few women in our study, however, experienced unique challenges in treatment continuity driven by societal and cultural norms. Some women stopped treatment because no family members were willing to accompany them to the treatment centre. Gender norms that do not allow women to leave home without a male family member hindered some women from accessing services. Injecting drug users were more likely to be lost to follow-up and untracked. Previous studies identified reasons for loss to follow-up among PLHIV who inject drugs, such as forgetting the date of the visit, being incarcerated, moving out of the city, or death (14,15). Stigma also played a role in discouraging PLHIV who inject drugs from seeking services (14).

Most anecdotal reflections from the tracking peers suggested that successful re-engagement into care was attributed to the use of peer-to-peer interactions, interpersonal counselling and consistent communication. This is similar to findings from previous studies indicating that good client–provider communication and peer-facilitated intervention improved treatment continuation (16,17). Community follow-up augmented interpersonal communication, which resulted in building rapport and trust and eventual re-engagement into care.

Four factors were identified as barriers to this intervention. First, the lack of tailored, differentiated service delivery limited continued access to treatment. This was compounded by socioeconomic constraints. Other studies have indicated that excessive patient follow-up with monthly or quarterly appointments resulted in dropouts due to patient fatigue (16). Second, inadequate communication, such as insufficient electronic records or inadequate interoperable data systems across ART centres, resulted in gaps in communication regarding records of people who transferred to other centres. This resulted in misclassification as lost to follow-up. Almost a tenth of those reported to be lost to follow-up were still on treatment at a different centre or in another country. Other studies have found that many PLHIV reported as lost to follow-up were still taking ART elsewhere (18–20). Incomplete documentation of clinic visits in the patient files and the national management information system worsened these communication gaps (20). Missing information in the national management information system forced peer trackers to manually extract data from ART files to find traceable contact information. Third, there was no systematic community follow-up of people who missed appointments in Pakistan. This was worsened by the prolonged period of 6 months used to define persons considered lost to follow-up, which resulted in a prolonged delay before an individual was

brought back to care (21), and delayed clinical action after missed appointments. Fourth, inadequate and poor quality of patient counselling on the benefits and the need for life-long treatment resulted in losses from care (22,23). In some cases, providing information about the benefits of treatment led to re-engagement into care, irrespective of the distance to the ART centre. This suggested that patients were not provided with complete information at initiation of or during treatment (24). The quality of counselling was decreased by unclear role distribution within ART centres, with no specific assignment of responsibilities for adherence counselling, or a limited number of counsellors available to attend to many patients. Other reasons for loss to follow-up were related to systemic obstacles. Incarceration was also reported as a hindrance, suggesting insufficient coordination of health services across community and prison services.

This study had some limitations. First, > 90% of the patient records had incomplete data at the treatment centre, including missing information on reported risk factors for infection, and the last visit date. We, therefore, triangulated data with the data of all patients on treatment at each centre to compare demographics. Second, peer trackers did not record refusals, although they were anecdotally reported to be minimal (< 5%). This prevented us from analysing further the determinants of re-engagement into care. Third, our population included few men who have sex with men and transgender people, which prevented us from drawing conclusions on whether these communities were more at risk of being lost to follow-up, or more likely to re-engage into care. Fourth, the large number of missing dates for the last visit at the ART centre prevented an analysis over time. Finally, nearly half of those who were lost to follow-up were not successfully tracked, which impeded their re-engagement into care.

Conclusion

Our peer-led intervention was effective in re-engaging PLHIV into care. The outcome of the intervention varied according to gender and injecting drug use. Quality data systems, standardized definitions (e.g. loss to follow-up), use of existing community networks, and early intervention contributed to our success. Negative outcomes were attributed to complicated service delivery that affected adherence. On the basis of these conclusions, we make the following proposals. First, community follow-up systems should be institutionalized for timely tracking of those who miss appointments. Second, interventions to re-engage PLHIV into care should address gender-related and key population specificities. Third, we need to harmonize and strengthen data flow and management between ART centres and communities. Fourth, we could introduce differentiated care, including multiple-months dispensing of medicines and community ART. Overall, we should use lessons learned to advocate for expansion of community-led approaches, capacity building of peers, and enhance patient education towards literacy on lifelong care.

Acknowledgements

We would like to express our gratitude to the field workers and peer trackers of the APLHIV in Pakistan who implemented the intervention.

Funding: The intervention was funded by the WHO Regional Office for the Eastern Mediterranean.

Conflict of interest: None declared.

Interventions communautaires visant à réintégrer les personnes vivant avec le VIH dans le système de soins au Pakistan

Résumé

Contexte : Au cours de l'année 2021, le Pakistan comptait près de 210 000 personnes vivant avec le VIH, et 27 % de celles qui avaient commencé un traitement en 2020 avaient abandonné les soins pendant l'année suivante.

Objectif : Évaluer l'efficacité d'une intervention dont le but était de réintégrer dans le système de soins les personnes vivant avec le VIH, qui avaient été perdues au suivi au Pakistan.

Méthodes : Entre septembre 2020 et mai 2021, l'Association des personnes vivant avec le VIH (APVVIH) a mis en œuvre une intervention de recherche et de secours pour celles qui avaient été perdues au suivi dans deux grands centres de traitement au Pakistan. Le personnel du centre a examiné les dossiers dans le but d'identifier les individus dont la prise en charge remontait à plus de six mois et, entre septembre 2020 et mai 2021, l'APVVIH les a contactés dans le cadre d'appels téléphoniques et de visites à domicile ayant pour objectif de les réintégrer dans le système de soins. Nous avons utilisé le logiciel SAS version 9.4 afin d'analyser les données et la régression logistique dans le but d'identifier les facteurs associés à l'arrêt du traitement et à la perte de ces personnes au suivi.

Résultats : Parmi les 4184 personnes vivant avec le VIH enregistrées (74 % d'hommes), 1517 personnes (36 %) dont 83,9 % d'hommes, 15,4 % de femmes et 0,7 % de transgenres, avaient abandonné les soins. Les membres de l'Association ont suivi 696 d'entre elles (46 %) : 295 (42 %) étaient décédées et 325 (47 %) avaient été réorientées vers les soins. Les raisons menant à l'abandon des soins étaient l'éloignement du centre de traitement antirétroviral ou le manque de ressources (45 %), l'usage de drogues par injection (19 %), les effets indésirables du traitement antirétroviral (9 %), la désinformation (9 %), l'absence de membre de la famille masculin pour accompagner les patientes au centre de traitement après le décès du mari (3 %). Aucune raison n'était invoquée dans 15 % des cas. Les usagers de drogues par injection et les hommes étaient plus susceptibles d'être perdus au suivi, ces derniers étant également plus à risque de devenir intraquables.

Conclusion : Cette intervention communautaire, qui a permis de réintégrer avec succès de nombreuses personnes vivant avec le VIH dans le système de soins, devrait être intensifiée pour réduire les pertes en matière de soins et de suivi au Pakistan, en particulier chez les usagers de drogues par injection et les hommes vivant avec le VIH.

التدخلات التي تقودها المجتمعات المحلية بهدف إعادة إلحاق المتعاشين مع فيروس العوز المناعي البشري بنظام الرعاية في باكستان

شيماء الصافوري، بريدجت مجيزا، محمد صفندر باشا، أصغر ستي، عمر حيدر، عزيز طارق، أحمد صبري الأعمى، محمد شاهد جميل، إيفان هيوتين، جمانة هرمز

الخلاصة

الخلفية: بحلول عام 2021، قُدِّر عدد المتعاشين مع فيروس العوز المناعي البشري في باكستان بنحو 210000، وفي غضون عام واحد كان قد انفصل عن الرعاية 27٪ ممن بدأوا العلاج في عام 2020.

الأهداف: هدفت هذه الدراسة الى تقييم فعالية إجراء تدخل مع المتعاشين مع فيروس العوز المناعي البشري المنقطع عن المتابعة، بهدف إعادة إلحاقهم بمرافق الرعاية في باكستان.

طرق البحث: في المدة بين سبتمبر/ أيلول 2020 ومايو/ أيار 2021، نفذت "رابطة المتعاشين مع فيروس العوز المناعي البشري" تدخل بحث وإنقاذ للمتعاشين مع فيروس العوز المناعي البشري المنقطع عن المتابعة في مركزي علاج كبيرين في باكستان. فاستعرض موظفو المركز السجلات لتحديد المنقطع عن الرعاية مدة تزيد على 6 أشهر، وفي الفترة من سبتمبر/ أيلول 2020 إلى مايو/ أيار 2021، تعقبتهم رابطة المتعاشين مع فيروس العوز المناعي البشري بالمكالمات الهاتفية والزيارات المنزلية لإعادة إلحاقهم بالرعاية. واستخدمنا الإصدار 9.4 من برنامج SAS لتحليل البيانات، فضلاً عن الانحدار اللوجستي الأحادي المتغير لتحديد العوامل المرتبطة بانفصال المريض عن الرعاية وانقطاع أثره.

النتائج: من بين المتعاشين مع فيروس العوز المناعي البشري المسجلين البالغ عددهم 4184 فردًا (74٪ ذكور)، انفصل عن الرعاية 36٪ (أي 1517 فردًا) منهم 83.8٪ ذكور، و15.4٪ إناث، و0.7٪ متحولون جنسيًا. فتعقب أعضاء رابطة المتعاشين مع فيروس العوز المناعي البشري منهم 696 فردًا (46٪)، فوجد أن 295 فردًا (42٪) توفوا، وأعيد إلحاق 325 فردًا (47٪) بالرعاية. وكانت أسباب الانفصال عن الرعاية بعد المريض عن مركز العلاج بمضادات الفيروسات القهقرية أو قلة الموارد (45٪)، وتعاطي المخدرات حقنًا (19٪)، والآثار الضارة للعلاج بمضادات الفيروسات القهقرية (9٪)، والمعلومات المضللة (9٪)، وتعذر حضور أحد الأقارب الذكور لمراقبة المريضة إلى مركز العلاج بعد وفاة زوجها (3٪)، في حين أن 15٪ لم يُبدوا سببًا. وكان الذكور من متعاطي المخدرات حقنًا هم الأرجح أن ينقطعوا عن المتابعة، كما كان الذكور هم الأرجح أن ينقطع أثرهم.

الاستنتاجات: نجح هذا التدخل الذي يقوده المجتمع المحلي في إعادة إلحاق كثيرين من المتعاشين مع فيروس العوز المناعي البشري بخدمات الرعاية. وينبغي توسيع نطاق تدخل إعادة الإلحاق الذي تقوده المجتمعات المحلية بهدف الحد من انقطاع الرعاية والمتابعة في باكستان، لا سيما بين متعاطي المخدرات حقنًا، والذكور المتعاشين مع فيروس العوز المناعي البشري.

References

- UNAIDS. AIDSinfo. Global data on HIV epidemiology and response (<https://aidsinfo.unaids.org/>, accessed 8 August 2024).
- Mugisa B, Sabry A, Hutin Y, Hermez J. HIV epidemiology in the WHO Eastern Mediterranean region: a multicountry programme review. *Lancet HIV*. 2022 Feb;9(2):e112–9. [https://doi.org/10.1016/S2352-3018\(21\)00320-9](https://doi.org/10.1016/S2352-3018(21)00320-9) PMID:35120632
- UNAIDS. Country progress report – Pakistan. Global AIDS Monitoring 2020. UNAIDS (https://www.unaids.org/sites/default/files/country/documents/PAK_2020_countryreport.pdf, accessed 31 July 2024).
- National AIDS Control Programme. Pakistan AIDS Strategy III 2015–2021. NACP; 2017 (<https://phkh.nhsrpk/sites/default/files/2020-12/Pakistan%20AIDS%20Strategy%20III%202015-2021.pdf> Published 2017, accessed 8 May 2024).
- Achakzai ABK, Pasha S. Challenges in retention of people living with HIV/AIDS, along continuum of care and treatment in Pakistan. *Clin Microbiol Open Access* 2016;5(1). <https://doi.org/10.4172/2327-5073.1000231>
- World Health Organization. Updated recommendations on service delivery for the treatment and care of people living with HIV March 2021 [website]. Geneva: WHO; 2021 (https://cdn.who.int/media/docs/default-source/hq-hiv-hepatitis-and-stis-library/hiv-servicedelivery_guidelines_march2021_slides.pdf?sfvrsn=17dd3b8f_5, accessed 31 July 2024).
- World Health Organization. WHO publishes new clinical and service delivery recommendations for HIV prevention, treatment and care [website]. Geneva: WHO; 2021 (<https://www.who.int/news/item/17-03-2021-who-publishes-new-clinical-recommendations-on-hiv-prevention-infant-diagnosis-antiretroviral-therapy-initiation-and-monitoring>, accessed 31 July 2024).
- World Health Organization. Standards and operational guidance for ethics review of health-related research with human participants. Geneva: WHO; 2011 (<https://www.who.int/publications/i/item/9789241502948>, accessed 31 July 2024).
- Mirzazadeh A, Eshun-Wilson I, Thompson RR, Bonyani A, Kahn JG, Baral SD, et al. Interventions to reengage people living with HIV who are lost to follow-up from HIV treatment programs: a systematic review and meta-analysis. *PLOS Med*. 2022 Mar 15;19(3):e1003940. <https://doi.org/10.1371/journal.pmed.1003940> PMID:35290369
- Takarinda KC, Harries AD, Shiraishi RW, Mutasa-Apollo T, Abdul-Quader A, Mugurungi O. Gender-related differences in outcomes and attrition on antiretroviral treatment among an HIV-infected patient cohort in Zimbabwe: 2007-2010. *Int J Infect Dis*. Jan 2015;30:98–105. <https://doi.org/10.1016/j.ijid.2014.11.009> PMID:25462184
- Hawkins C, Chalamilla G, Okuma J, Spiegelman D, Hertzmark E, Aris E, et al. Sex differences in antiretroviral treatment outcomes among HIV-infected adults in an urban Tanzanian setting. *AIDS*. 2011 Jun 1;25(9):1189–97. <https://doi.org/10.1097/QAD.0b013e3283471deb> PMID:21505309
- Dou Z, Xu J, Jiao JH, Ma Y, Durako S, Yu L, et al. Gender difference in 2-year mortality and immunological response to ART in an HIV-infected Chinese population, 2006–2008. *PLOS ONE*. 2011;6(8):e22707. <https://doi.org/10.1371/journal.pone.0022707> PMID:21857947
- Maskew M, Brennan AT, Westreich D, McNamara L, MacPhail AP, Fox MP. Gender differences in mortality and CD4 count response among virally suppressed HIV-positive patients. *J Womens Health (Larchmt)*. 2013 Feb;22(2):113–20. <https://doi.org/10.1089/jwh.2012.3585> PMID:23350862
- Mousavian G, Ghalekhan N, Tavakoli F, McFarland W, Shahesmaeili A, Sharafi H, et al. Proportion and reasons for loss to follow-up in a cohort study of people who inject drugs to measure HIV and HCV incidence in Kerman, Iran. *Subst Abuse Treat Prevent Policy*. 2021;16:29. <https://doi.org/10.1186/s13011-021-00368-9>
- Ruan Y, Qin G, Liu S, Qian H, Zhang L, Zhou F, et al. HIV Incidence and factors contributed to retention in a 12-month follow-up study of injection drug users in Sichuan Province, China. *J Acquir Immune Defic Syndr*. 2005 Aug 1;39(4):459–63. <https://doi.org/10.1097/01.qai.0000152398.47025.of> PMID:16010170
- Koirala S, Deuba K, Nampaisan O, Marrone G, Ekstrom A. Facilitators and barriers for retention in HIV care between testing and treatment in Asia – A study in Bangladesh, Indonesia, Lao, Nepal, Pakistan, Philippines and Vietnam. *PLOS ONE*. 2017 May 1;12(5):e0176914. <https://doi.org/10.1371/journal.pone.0176914> PMID:28459881

17. Enriquez M, Cheng AL, McKinsey D, Farnan R, Ortego G, Haye D, et al. Peers keep it real: re-engaging adults in HIV care. *J Int Assoc Provid AIDS Care*. 2019 Jan–Dec 2019;18:2325958219838858. <https://doi.org/10.1177/2325958219838858> PMID:30950300
18. Tweya H, Feldacker C, Estill J, Jahn A, Ng'ambi W, Ben-Smith A, et al. Are they really lost? "true" status and reasons for treatment discontinuation among HIV infected patients on antiretroviral therapy considered lost to follow up in Urban Malawi. *PLoS One*. 2013 Sep 26;8(9):e75761. <https://doi.org/10.1371/journal.pone.0075761> PMID:24086627
19. Balogun M, Meloni ST, Igwilo UU, Roberts A, Okafor I, Sekoni A, et al. Status of HIV-infected patients classified as lost to follow up from a large antiretroviral program in southwest Nigeria. *PLoS One*. 2019 Jul 25;14(7):e0219903. <https://doi.org/10.1371/journal.pone.0219903> PMID:31344057
20. Niyitegeka C, Uwera T, Korukire N, Nasiru S, Hakizimana I, Xavier SF, et al. Synchronization of patient data among health facilities through electronic medical records system: a case study of Kabgayi District Hospital. *Rwanda J Med Health Sci*. 2020 Feb 4;2(3). <https://doi.org/10.4314/rjmhs.v2i3.12>
21. Grimsrud AT, Cornell M, Egger M, Boulle A, Myer L. Impact of definitions of loss to follow-up (LTFU) in antiretroviral therapy program evaluation: variation in the definition can have an appreciable impact on estimated proportions of LTFU. *J Clin Epidemiol*. 2013 Sep;66(9):1006–13. <https://doi.org/10.1016/j.jclinepi.2013.03.013> PMID:23774112
22. Nyanzi B, Medina Lara A, Watera C, Munderi P, Gilks C, Grosskurth H. The role of HIV testing, counselling, and treatment in coping with HIV/AIDS in Uganda: a qualitative analysis. *AIDS Care*. 2009 Jul;21(7):903–8. <https://doi.org/10.1080/09540120802657498> PMID:20024747
23. Chatha ZF, Rashid U, Olsen S, Ud Din F, Khan A, Nawaz K, et al. Pharmacist-led counselling intervention to improve antiretroviral drug adherence in Pakistan: a randomized controlled trial. *BMC Infect Dis*. 2020/11/23 2020 Nov 23;20(1):874. <https://doi.org/10.1186/s12879-020-05571-w> PMID:33228562
24. Fuente-Soro L, López-Varela E, Augusto O, Bernardo EL, Sacoor C, Nhacolo A, et al. Loss to follow-up and opportunities for reengagement in HIV care in rural Mozambique: a prospective cohort study. *Medicine*. 2020 May;99(20):e20236. <https://doi.org/10.1097/md.000000000020236> PMID:32443358