ART Adherence Unit
by Nai Zindagi Charity

A therapeutic community facility that aims to improve HIV treatment outcomes for people who inject drugs in Pakistan.

An Independent Evaluation Report

April 2016

Acknowledgements

Nai Zindagi would like to thank Mainline, which supported the ART Adherence Unit (AAU) under the Bridging the Gaps initiative of the Dutch Ministry of Foreign Affairs from January 2014 to December 2015, and the Global Fund to Fight AIDS, Tuberculosis and Malaria, which began supporting the facility in 2016 in addition to providing support to CoPC+ sites and this independent evaluation.

We would also like to thank the National and Provincial AIDS Control Programs, ART clinics from the federal capital and all four provinces, provincial treatment coordinators, the Association of PLHIV (APLHIV) and the Drug Users Network (DUNE), the CCM Secretariat, UNICEF and UNAIDS.

A very special thank to all clients and their families who made this evaluation possible.

A A U

ATTENDEES WERE

43-51

TIMES MORE LIKELY TO BE ADHERENT IN A PERIOD BETWEEN 7-19 MONTHS OF TREATMENT INITIATION

IN TERMS OF THE CASCADE OF SERVICES FROM PREVENTION THROUGH TO TREATMENT AND CARE, THE AAU SITS AT THE THRESHOLD OF TREATMENT INITIATION

RESULTS MATTER

ADHERENCE RATES DECLINE OVER TIME MUCH FASTER

44.4%

FOR THOSE NOT ATTENDING AAU

VERSUS

1.7%

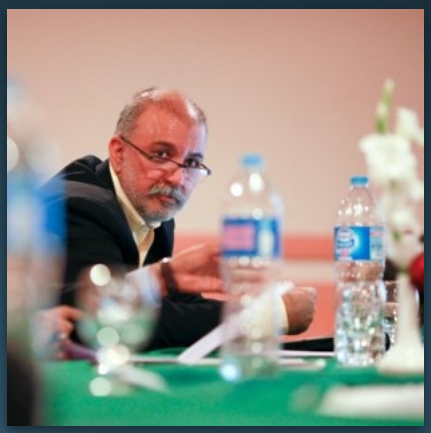
FOR THOSE ATTENDING AAU

60%

OF THOSE REPORTING RELAPSE ARE ALSO REPORTING ADHERENCE WITH HIGHER RATES AMONG CLIENTS OF AAU


General Conclusions (2)







The ART Adherence Unit (AAU) is a residential rehabilitation facility for HIV positive persons who inject drugs (PWID) that combines treatment for opioid dependence with HIV treatment adherence support. It aims at stabilising the client so that HIV treatment becomes a realistic and achievable proposition for them.

The evaluation study detailed in this report was commissioned by Nai Zindagi to better understand the AAU's contribution to addressing the treatment coverage problem for PWID in Pakistan. It took place in the first quarter of 2016 and was designed and overseen by three independent consultants.

The study consisted of five separate methodological components including:

- a cross- sectional survey of ART-initiated PWID,
- a series of focus group discussions with ART clinic staff,
- PWID family members and spouses,
- a survey of the Nai Zindagi staff team, and
- an observational residency at the AAU conducted by an international harm reduction expert

The evaluation found a statistically significant impact on ART adherence for clients who had attended AAU when compared to those who had not. By the end of 2014 people who inject drugs (PWID) formed the single largest group of an estimated 91,340 people living with HIV (PLHIV) in Pakistan.

AAU attendees were 43-51 times more likely to be adherent in a period between 7 and 19 months of treatment initiation.

They also accounted for "the bulk of new infections." The most recent Global AIDS Response Progress (GARP) Report for the country declared that the HIV epidemic is "mainly driven by PWID," with the weighted national HIV prevalence among injecting drug users estimated to be 37.8%.

This makes the issue of securing adequate coverage of Antiretroviral Treatment (ART) for this population critical to the control of what is still a growing epidemic. However, achieving adequate treatment coverage for PWID with HIV in Pakistan has proved particularly challenging.

The GARP report estimates less than 10% ART coverage of all eligible people by the end of 2014 in Pakistan.

To understand the challenge that Pakistan faces in addressing this problem it is important to break down "treatment coverage" into its constituent, and sequential, components of treatment initiation, retention in treatment, and adherence to treatment.

The aim should be to optimise all three by identifying and addressing barriers to initiation, understanding and addressing causes of loss to follow up (LTFU), and understanding and addressing causes of non-adherence.

Anticipated adverse treatment outcomes create a systemic caution around prescribing treatment. As one report puts it: it is *"pre-emptively assumed that PWID [will] not adhere to treatment and should not be initiated."* This assumption needs to be addressed if the treatment coverage problem is to be resolved.

The conundrum is illustrated by one of the few pieces of research that has been conducted into ART compliance among PWID in Pakistan. A descriptive observational study tracked 162 patients (81 PWID, 81 non-PWID) for five years from 2008-2012. By the end of the study 59% of the PWID were lost to follow up and only 20% were compliant. By comparison the non-PWID were 90% compliant and only 2% were lost to follow up.

Although the paper acknowledges that **"people who inject drugs can successfully undergo treatment and benefits from ARVs", and that "ensuring adherence to ARVs in IDUs can significantly prevent the spread of HIV in Pakistani population"**, its main conclusion is that illiteracy, poor socio-economic status and multiple co-morbidities "contribute to poor compliance in IDUs and rampant spread of resistant organisms … which contribute to majority of HIV cases in Pakistan."

The only suggestion the paper makes on how to address the problem is that "NGOs working in this field should work vigilantly and ensure complete rehabilitation and proper follow-up of IDUs before they are sent back to their homes."

The paper's conclusions are questionable. As mentioned above, adherence (or compliance) rates are dependent on retention rates. If 60% of patients are lost to follow up then adherence rates will inevitably be low, regardless of the demographic and disease characteristics of the client group. And it is not at all clear how illiteracy, poor socio-economic status and multiple co-morbidities would contribute to loss to follow up (the mere presence of these characteristics in the group does not of itself establish a causal link with their tendency to drop out of treatment.)

There is no real analysis of the causes of the remarkably high loss to follow up rates. The author's suggestion that the solution is for NGOs to ensure "complete rehabilitation" indicates that they are perhaps aware of this and are inclined to attribute the cause to drug use itself, though this is not explicitly stated and would, in any case, have very weak explanatory value; drug users are lost to follow up because they are drug users.

Regardless of the explanation there is clearly a very significant problem with retaining PWID in ART treatment in Pakistan and adherence rates will not increase unless this retention problem is properly understood and addressed.

Epidemiological Analysis of HIV Epidemic and AIDS Response in Pakistan, Research report Pakistan Global AIDS Response Progress Report (GARPR) 2015, NACP, p8
ibid, p8 & p11, p19

The recommendation for "complete rehabilitation" requires further elaboration, especially if we are to fully understand the "negative feedback loop" - from anticipated adverse treatment outcomes to restrictive treatment initiation - referred to above.

The Daud et al paper2 evidences the adverse treatment outcomes (although wrongly weights them as compliance issues rather than retention issues.) A large portion of PWID initiating ART between 2008 and 2012 were lost to follow up.

This has fuelled concerns among clinicians about the potential emergence of treatment resistant strains.

During the development of Pakistan's recent HIV Concept Note in 2015 these concerns were one of the main reasons given by clinicians for still insisting that PWID undergo two weeks detoxification prior to ART initiation, despite the fact that national guidelines no longer require this. Again, the implication is that drug use itself is perceived to be the main cause of loss to follow up and if we can convert a drug user into a ex-drug user we will stand a much better chance of retaining him in treatment. This is why "complete rehabilitation" is viewed as a solution.

The main problem with the "no initiation without rehabilitation" approach to treating HIV infected PWID in the Pakistan context is the limited availability of quality services for addressing opioid dependence.

With no OST programmes in place, this makes the coverage of treatment (at the initiation end of the continuum) totally dependent on the capacity and availability of quality detoxification services.

A collaborative, coordinated and fully integrated approach is required in order to boost treatment outcomes for this population. This might well mean a new level of on-going treatment access support to ensure that PWID initiating treatment stay adherent and make it back to their next appointment. Dispensing the medications and scheduling the next clinic appointment alone is unlikely to suffice. This is particularly so given that clinics are often situated a long way from the client's place of residence and multiple visits are often required.

These issues will be returned to throughout the course of this report. It is within the context of the challenges outlined above that we can now introduce the ART Adherence Unit (AAU) run by Nai Zindagi, the civil society PR for Pakistan's current HIV grant from the Global Fund.

In terms of the cascade of services from prevention through to treatment and care, the AAU sits at the threshold of treatment initiation.

It is an 8-week residential care programme that is specifically designed to simultaneously address the opioid dependence and HIV treatment adherence support needs of HIV positive PWID. Its clients have all been certified by clinics as eligible for treatment and are just beginning their opioid-free treatment journey.

Opening in January 2014, the facility is operated by Nai Zindagi, and was funded in its first two years by the Dutch Ministry of Affairs through the Mainline Foundation in the Netherlands. It has recently secured further support from the Global Fund to continue its operation until the end of 2017.

2 Anti-Retroviral Drugs Compliance In Intravenous And Non Intravenous Drug Abusers, Daud et al, J Ayub Med Coll Abbottabad 2014;26

The original design of the AAU service was built around the ART treatment centres' requirement that PWID clients undergo a minimum of 2 weeks detoxification prior to treatment initiation. Detoxification and ART initiation support were initially provided in two separate residential facilities some distance apart. A client who had been tested HIV positive, and who had a CD4 count of 500 or below, would undergo residential detoxification for two weeks before being escorted to the clinic to initiate treatment. After treatment initiation the client would then be taken to the AAU for a therapeutic community programme based on behaviour shaping strategies and tools.

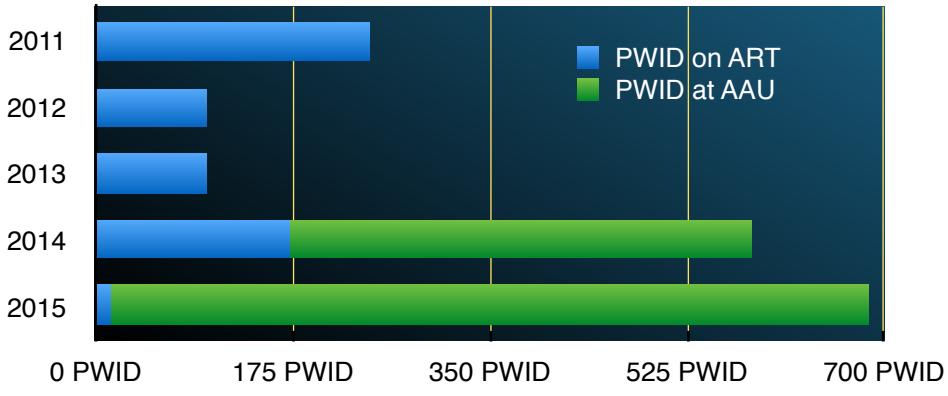
The overall objective of the AAU is primarily about supporting the client to reorient their life so that lifelong treatment with ART becomes a realistic and achievable proposition for them. The service model is designed in recognition of the fact that the transition from active opioid user to ex-drug user is a process with many potential stumbling blocks and cycles of relapse along the way. It is based on principles of respect for the client's life choices and an understanding that the healing process that the client needs to go through in order to regain his sense of self-worth has only just begun.

The service is consensual; a client is free to leave at any time. The approach is intended to be entirely non-coercive and founded on principles of mutual respect between staff and client.

Structure and order are provided in the form of a fixed schedule of daily activities that include individual and group therapy sessions, lectures and presentations on various topics around HIV/AIDS (treatment adherence, safer behaviours, OIs,) sessions on psychosocial issues (goal setting, family reintegration, anger management, disclosure and risk, relapse prevention,) and family call time and diary writing.

The facility is staffed by a mixed gender team of Medical Officers, Paramedics, Psychologists, Counsellors, and a compliment of administrators, with several of the counsellors themselves being ex-users. Medical services provided include basic health care, treatment of OIs (as recommended by the special clinics) STI treatment, ARV adherence monitoring, diagnosis and treatment of TB, and medical referrals.

From 2011 to 2013 PWID as a percentage of all PLHA on treatment remained relatively stable at a rate of 11-13%. After 2 years of operation for AAU, the absolute numbers of PWID on treatment increased 288% from 441 at the end of 2013 to 1710 at the end of 2015. People attending AAU represented 40% of all PWID on treatment in 2014 and 2015, or 85% of the growth in numbers of PWID on treatment in those two years. As a percentage of all PLHA on treatment PWID had doubled in these two years to 23%.



The Rise in PWID on ART Coincides with the Operation of AAU

After completing two weeks detoxification the client would then be escorted to the ART centre. Once baseline tests were completed and eligibility confirmed the clinic would prescribe treatment, giving two months medication to the Nai Zindagi Social Mobiliser who had accompanied the client to the clinic.

The Social Mobiliser would then escort the client back home and arrange admission to the AAU. Once admission arrangements had been confirmed the client and the medication would then be taken to the AAU where treatment would be initiated under the supervision of the Medical Officers at the AAU.

It is important to consider the travel distances involved in the service flow and what they might mean to a PWID. Clients are being referred in from 28 Global Fund supported Continuum of Prevention and Care (CoPC+) sites across 3 provinces. In some cases multiple clinic visits are required prior to AAU in order to complete the baseline investigations necessary to begin treatment initiation.

Distances from CoPC sites to the detox centre or AAU range from 2 to 60 hours return trip journey time. Nai Zindagi arranges transport and escort for all these trips but they nonetheless place considerable demands on a clientele group that struggle with schedules and appointments due to the chaotic nature of their lifestyle.

Many of these trips can involve travel across security checkpoints requiring proof of identification, which the clients may be unable to produce.

Although Nai Zindagi's service data appeared to be showing favourable outcomes in terms of post-AAU, ART adherence there was a demand for an independent assessment of the model to better understand its impact on improving treatment outcomes for PWID. The evaluation study that is the subject of this report was commissioned in response to that demand.

AAU Clients in a group session

Study Overview

The study was designed by a team of three consultants with expertise in programme evaluation, harm reduction, Global Fund grant oversight and community systems strengthening. The consultant team led a study design workshop from 19th to 21st January 2016 with participation from the Nai Zindagi staff team.

Once the basic methodology of the study had been mapped out it was presented to a group of around 40 stakeholders in a consultation meeting held on the 22nd January. In addition to the consultant and Nai Zindagi teams participants included representatives from the National and Provincial AIDS Control Programmes, ART clinics from the federal capital and all four provinces, provincial treatment coordinators, the Association of PLHIV (APLHIV) and the Drug Users Network (DUNE), the CCM Secretariat and UNICEF. Feedback received helped fine-tune the study design.

Three broad objectives were agreed upon for the study:

1. **To determine what impact completion of a full residency (8 weeks) at the AAU has on ART adherence and drug relapse outcomes for HIV+ PWID initiating ART.**
2. **To identify other factors that influence ART adherence and drug relapse outcomes for HIV+ PWID initiating ART.**
3. **To identify opportunities to further improve the AAU model.**

Methodology

Cross-Sectional Survey of ART-Initiated PWID

In order to assess the impact of AAU on ART adherence and drug relapse rates it was decided to do an analytical comparison of outcomes for two groups of ART-initiated PWID; one group exposed to AAU, the other unexposed.

The following were agreed upon as sample inclusion criteria:

- To be eligible to participate the client must be an HIV+ PWID who initiated ART at some point between 1st July 2014 and 30th June 2015.
- Nai Zindagi must have a record of the ART registration number of the client.
- (AAU exposed group only) The client must have completed the full 8 weeks residency at AAU.
- (AAU naïve group only) The client must never have attended AAU.

Consultative Meeting

A set of criteria was developed to determine which of the 28 CoPc+ sites we would sample from which are as follows:

- A participating city must have a minimum of 2 clients, from among those meeting the client inclusion criteria above, who have been contacted by Nai Zindagi in the last month.
- The city must be in Punjab province (AAU was not available to clients in other provinces until February 2015)
- Overall city selection was to include cities referring clients to at least 5 different ART clinics.
- Overall city selection was to include a broad and representative range of clinic travel distances.

The cities selected on the basis of the city selection criteria above were: Gujrat, Jhang, Jhelum, Kasur, Khanewal, Rahim Yar Khan, Rawalpindi, and Sahiwal and Okara.

Participants were selected for inclusion by the consultant team from a full list of the total population of eligible clients provided by Nai Zindagi. This list was broken down by the three strata of the overall sample so that we could short-list evenly across the four quarters and from each city in proportion to the total number of clients there. We short-listed more than the sampling targets to allow for the fact that some clients may prove unreachable. In all, 169 clients from 10 cities were interviewed of which 128 were deemed fully eligible.

The Structure of the Final Sample

Total Sampled	169	
Ineligible	41	
	Outside of sampling time frame	Never initiated ARVs
	28	13
Eligible	128	
	Intervention	Control
	104	24

In order to triangulate the client's self-reports of ART adherence or non-adherence we agreed with clinicians and the AIDS Control Programmes that once the survey had been completed we would check back with the clinics on the clinic attendance records of the clients in the sample.

Focus Group Discussions with ART Clinic Staff

A total of three focus group discussions were held with 13 clinic staff; 6 in DG Khan, 3 in Faisalabad and 4 in Lahore. These included clinicians in charge, medical officers, counsellors, a staff nurse, a clinical psychologist, PPTCT case managers and data entry operators. The discussions were facilitated by a member of the consultant team and permission was sought to audio record the proceedings. Summary notes were produced for each of the three discussions.

Focus Group Discussions with Spouses and Family Members of ART-Initiated PWID

These were to take place in each of the 8 sites originally selected to participate in the client survey: Gujrat, Jhang, Jhelum, Kasur, Okara, Rahim Yar Khan, Rawalpindi, and Sahiwal. They were facilitated by trained facilitators and all 8 were audio recorded. Summary notes were then produced from the recordings.

Survey of Nai Zindagi Staff

Surveyed staff included the 8 Social Mobilisers and 8 Female Outreach Workers at the CoPC+ sites in the 8 cities originally selected for inclusion in the client survey. Additionally we surveyed 12 staff at the AAU (6 Counsellors, 2 Medical Officers and 4 Paramedics.). The aim was to get greater insight into factors influencing ART take up and adherence and relapse outcomes from staff who support clients at different points in the continuum (pre-initiation, during initiation and stabilisation, and after reintegration into the community.) In all 28 staff members were surveyed. The data was entered into an Access database and then uploaded into SPSS for analysis.

Observational Residency at AAU

The Observational Residency at AAU was conducted by the international harm reduction expert on the consultant team. In the course of the residency 15 AAU staff and 15 clients were interviewed. The results of the interviews and observations were written up in three separate documents; one summarizing discussions with staff, one summarizing discussions with clients and one giving an overview of findings from the residency.

Research Tools, Field Testing and Interviewer Training

A set of purpose-made research tools were developed for each of the study components as follows:

- A client questionnaire
- Two focus group discussion guides; one for discussions with ART clinic staff, one for discussions with families/spouses of PWID
- One observation guide for the AAU residency with adapted versions of staff and client questionnaires to help guide the informal interviews.

A team of four interviewers/discussion facilitators were trained by a member of the consultant team to use the client questionnaire and family/spouse focus group guides.

Data Entry, Cleaning and Analysis

Data from the client and staff questionnaires were inputted into a purposely-designed Access database before being uploaded into SPSS for analysis. An extensive data cleaning process took place.

The main impact of the data cleaning was the loss of a considerable portion of those from the control group due to either their having been initiated on ART after the end of the sampling timeframe or their never having been initiated on ART.A weighting was applied to the final sample based on the 3-tiered structure in the design to adjust for under and over-sampling.

To develop the weighting the cities were divided into two clusters: those for which round-trip CoPC+-to-clinic travel time was 2 hours or less and those for which round-trip CoPC+-to-clinic travel time was greater than 2 hours. The result of the weighting is to make the sample look closer to the population so that the results can be generalised back to the population as a whole.

This analysis showed that both control and intervention groups were split 50/50 across the first and second halves of the sample time frame thereby removing the possibility of the impact results being biased due to the groups being significantly skewed towards different ends of the timeframe.

During the Observational Residency at the AAU

Findings

Adherence Outcomes

Results from the client survey showed an adherence rate of 77.4% for those who had completed residency at AAU compared to 51.1% for those who had never attended.

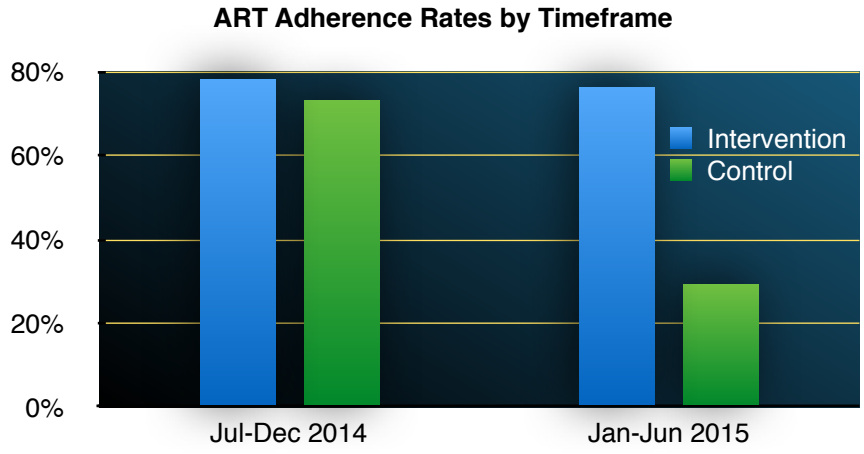
Q1-Q4	% Reporting Adherence	N	Error Margin	95% LCI	95% UCI
Intervention	77.40%	99.95	5.90%	71.60%	83.30%
Control	51.10%	24.66	14.10%	37.00%	65.20%

This result was statistically significant at a 95% confidence interval. In terms of probability this means that PWID in the sampled population were more likely to be adhering to ART if they had attended AAU than those who had never attended by a factor of 51 ((77.4/51.1)-1). This suggests that AAU is having a very large impact on ART adherence.

The analysis revealed that the difference in adherence rates between the two periods (July - December 2014) and (January - June 2015.) were very different between the two groups. For those attending AAU adherence rates were 78.3% for the later intake and 76.6% for the earlier intake.

For those not attending AAU the figures were 73.3% and 28.9% respectively. The difference in adherence rates between later and earlier intake is 1.7% for those attending AAU versus 44.4% for those not attending.

This would indicate that adherence rates are declining over time at a much faster rate for those not attending AAU.



The results above are based on the self-reported adherence of the clients at the point of the survey. We asked the clients whether they are currently taking ART, how often they are taking it and when they last took it. Among those indicating they are currently taking ART in both groups (intervention and control) there were very high rates (95%+) of taking medicines daily and having taken it within the last day, with no significant difference between the two groups.

Overall, data from the clinics verified 92% of those reporting to be adherent and 74% of those reporting non-adherence from the ART clinic records.

Relapse Outcomes

Results from the client survey show that for those who had completed residency at the AAU 42% had not relapsed to drug use compared to 34.8% for those who had never attended.

Q1-Q4	% Reporting No Relapse	N	Error Margin	95% LCI	95% UCI
Intervention	42.00%	99.95	6.90%	35.10%	48.90%
Control	34.80%	24.66	13.40%	21.40%	48.20%

This means that 58% of those attending AAU and 65.2% of those not attending AAU had relapsed. Overall 59% of the entire sample had relapsed to drug use within 7 to 19 months of completing detoxification.

However, 60% of those reporting relapse are also reporting adherence to ART. Rates of maintaining adherence after relapse were higher for those who have attended AAU (63%) than for those who have not attended (50%.) These results show that the relationship between ART adherence and relapse to drug use may not be as simple as has previously been supposed.

This is significant because much of the hesitation around putting PWID on ART in Pakistan has to do with the perceived likelihood of relapse and the assumption that non-adherence will inevitably follow.

The proportion of those who had attended AAU reporting being both drug free and ART adherent was more than double the proportion of those in the control group.

AAU	In Recovery (drug free)	Relapse (taking drugs)
ART Adherent	41%	36%
Non Adherent	1%	22%

Control	In Recovery (drug free)	Relapse (taking drugs)
ART Adherent	18%	33%
Non Adherent	17%	32%

Despite the relatively high relapse rates we are reporting there are some positive messages in here that can be useful to the overarching aim of improving ART adherence rates among PWID. Our data shows that ART adherence is still possible for individuals who have relapsed to drug use and that individuals who do relapse may not be relapsing to behaviours that are as harmful as the ones they had prior to detoxification. A combined approach to treating opioid dependence and supporting HIV treatment can help boost adherence outcomes. With relapse being a likely prospect the issue becomes how to support PWID to maintain ART adherence over successive cycles of relapse and recovery.

Additional Factors Influencing ART Adherence and Drug Relapse

Relapse

Regarding reasons for relapse the most common reasons given by PWID who had relapsed were lack of family support (27%), lack of social service support (23%), and lack of employment or financial problems (23%) (answers not mutually exclusive.)

In the qualitative narrative there were frequent references to the influence of being back with the same circle of friends in the same environment. Life problems could act as triggers; family disputes, divorce and relationship problems, traffic accidents, arrest and being made redundant were variously mentioned. Sexual dysfunction was also cited as a reason for relapse by a number of clients. We also asked those that had not relapsed what had helped them to stay away from drugs. The biggest motivator for the clients was health (75%), followed by family (68%) and spouse (34%,) (answers not mutually exclusive.) Just over half (54%) of those not currently taking drugs reported receiving support to help them stay off drugs. The sorts of support received to prevent relapse included family support (76%), Nai Zindagi Social Mobiliser or Outreach Worker Support (34%), and peer support (30%.)

From the perspective of family members and spouses the continuity gap between detoxification, ART initiation and AAU residency was a significant factor in causing relapse. In 2016 Nai Zindagi has merged the detox unit into the AAU and negotiated with the clinics to secure medicines prior to detoxification.

Other factors identified by family members and spouses as leading to relapse included the relative length of drug use in relation to the length of the rehabilitation process, financial issues including unemployment and trust issues around money, depression and low self-esteem (often related to not being able to earn a living,) and leaving detoxification early due to being homesick.

Feedback from the Nai Zindagi staff team reinforced a couple of the points coming up from the clients, their family members and spouses.

In general the input from the clinics was more about adherence than relapse, which is unsurprising given that their primary role is HIV treatment. But they did observe that quality detoxification and rehabilitation services are scarce. The AAU is one of a kind and there is a lack of quality district level detoxification services.

Adherence

The most common reasons for non-adherence cited by PWID who were no longer taking ART were side effects (47%) and relapse to drug use (37%.) Others mentioned spells in jail and a fear that simultaneous use for ARV and drugs would lead to death. The most commonly cited factors were support from Nai Zindagi Social Mobilisers and/or Outreach Workers (51%,) support from family (46%,) and self-motivation (43%,) (answers not mutually exclusive.)

Overall, clients reporting adherence were also reporting a relatively high level of support. Some 87% reported receiving some kind of adherence support. This included being accompanied to clinics by Nai Zindagi Social Mobilisers (66%,) having medicines brought from clinics by Social Mobilisers (21%,) receiving motivational support from family members (67%) and Social Mobilisers (64%,) and receiving medical (55%) and transportation support (43%,) (answers not mutually exclusive.) Overall there is a strong correlation between adherence and the receipt of some kind of adherence support.

The focus group discussions with family members and spouses echoed much of what we heard from the clients with regard to adherence. Side effects, fear of death, and myths around simultaneous ART treatment and drug use were given as reasons for stopping ART. Support from Nai Zindagi was viewed as being highly instrumental in getting their spouse/family member into treatment (they would not have gone of their own motivation,) and the AAU was credited with maintaining ART adherence after drug relapse. Nai Zindagi staff members attributed much of the motivation for a client to initiate treatment to the client's own desire to stay healthy.

The clinics tended to view relapse as the primary cause of non-adherence though there was also recognition of the fact that greater family involvement could help improve treatment outcomes. A major concern on the part of clinics was the continuity of case management as the client moves across the cascade from clinic to AAU and back to clinic.

AAU Clients during an AAU event

Improvements already introduced in the AAU Model

- The merger of the detoxification unit into the AAU unit in 2016. and the doubling of AAU's bed capacity from 100 to 200 beds in 2016.
- The In-Touch follow-up service for clients regularly discharged from AAU. This programme provides clients who have successfully completed a full residency at AAU with a mobile phone. A team of two Nai Zindagi staff contact the discharged clients on these phones on a weekly basis. This enables the provision of follow up support to promote adherence and prevent relapse, and also improves post-AAU client tracking.
- Mobile drug treatment for relapsed AAU Alumni who are adherent on ART in their district of origin and initiation of adherence and relapse prevention focussed self-help groups for ex AAU clients and their families in selected districts. This pilots supported by Mainline through Bridging the Gaps initiative of the Dutch Ministry of Foreign Affairs.
- Improved coordination between CoPC+ sites and ART Centres. In a PR meeting held on the 14th March 2016 a number of measures were agreed between the PRs to improve coordination between clinics and CoPC+ sites. These included improved client tracking to prevent LTFU through monthly sharing of data regarding lost clients.

World AIDS Day 2015 at the AAU

Conclusions

We noted at the outset that improving ART coverage for PWID in Pakistan meant addressing issues around treatment initiation, retention and adherence together. This evaluation has found that the AAU is making a considerable contribution to this task.

Initiation

Our literature review found that the advent of the AAU has coincided with a significant increase in the numbers of PWID on ART treatment in 2014 and 2015. People attending AAU represent 85% of the growth in numbers of PWID on treatment in that period.

AAU is clearly helping to address the bottleneck caused by the limited supply of quality detoxification services as identified by the ART clinics. The clinic's requirement that PWID undergo detoxification prior to treatment initiation, and the absence of OST for the foreseeable future, mean that AAU has an important role to play in increasing the flow of PWID into treatment.

There is a critical issue about treatment readiness that AAU is helping to address.

Without OST programmes, AAU remains the ONLY option we have to achieve this treatment in that period.

Retention

We identified a significant point in the cascade (between detoxification and treatment initiation support) where dropout was occurring; this has since been remedied by the merger of the detox unit into the AAU.

Adherence

The results of our study show that AAU is having a strong impact on ART adherence for PWID when compared to the alternative of not attending AAU, exposure to other services being equal. A person attending AAU was between 43 and 51 times more likely to be adherent to ART than a person who did not attend AAU. Overall the adherence rate was 77.4% for those attending AAU versus 51.1% for those not attending. There is encouraging evidence that adherence can and is being maintained during relapse for a significant portion of those who relapse. The data suggests that the provision of on-going post-AAU support is an important enabling factor.

Concurrent treatment of opioid dependence and HIV

The facility creates an environment where it is possible to foster a high degree of treatment literacy that stands its clients in good stead regardless of whether or not they eventually relapse to drug use. There is a broader need for HIV treatment services to adapt to the fact of relapse and further develop support services to help clients maintain adherence over the relapse cycle. The AAU provides a good foundation to help make this achievable.

Recommendations

- There needs to be stronger coordination between CoPC+ sites and clinics around intake of new clients. New clients are required to complete a series of clinic baseline checks prior to treatment initiation. These are often not available at the clinics themselves and require trips to other facilities. Failure to take the test before that time can mean an additional visit for the client and a risk that other baseline test reports go missing in the meantime. Every time a PWID is required to make a further trip to complete a further process step presents a risk of LTFU. This is particularly so when the distances involved are considerable. There needs to be a coordinated effort to manage these logistics and where possible simplify the process.

- There needs to be a balance between the focus on new client initiation and the follow up of old clients. Maximising intake at the expense of follow up will only result in increased LTFU. There needs to be an appreciation among all stakeholders, including donors, about the resources that will be needed to address the retention problem through an appropriate level of post-initiation support.

- The current arrangement between the clinics and AAU requires a transfer of case management from clinic to AAU and back again. This is not just a question of having the pills follow the patient. There needs to be a two-way flow of information about the client's progress in following treatment so that both sides of the cascade transfer point are in the picture about outcomes. A strongly coordinated oversight process will make it less likely that clients are LTFU. Related to this point there is an urgent need for better integration of the respective M&E systems of the clinics and Nai Zindagi. Shared client identifier codes would be a good start but the over-arching system also needs to work in such away as to ensure that the point of treatment initiation and the point of LTFU

- The period immediately following AAU discharge is likely to be a risk point for potential LTFU. It is recommended that a coordinated schedule of short-term support over the months immediately following discharge is shared between clinic, AAU and CoPC+ site. All parties should be aware of the date of discharge, the date of the clients next clinic appointment and the length of time that the client's existing supply of medications will last for.

- There is a recognised need for more relapse prevention support with which the consultant team concurs. But there is also a need for relapse management support to ensure that when relapse does occur it does not result in non-adherence. There needs to be a shift in mind-set that accommodates relapse as a fact of life for a considerable population of PWID on treatment and adjusts services accordingly with a view to supporting adherence across the relapse cycle. In relation to this it is highly recommended that healthcare and related support workers at all stages in the cascade avoid perpetuating the myth that relapse + ARV = death.

- There is considerable demand for a scale up of the AAU from all quarters including clinics and clients and their families. This is not just an issue of more beds but of more facilities in different locations.

- Nai Zindagi could usefully review its M&E system to identify opportunities for improved centralisation and standardisation across the various organizational units. Given that clients need to be tracked from CoPC+, through AAU and back to CoPC+, with follow-up support from the In Touch programme and other soon-to-be-started support services it would be extremely useful to have a centralised data system that tracked an individual client's exposure to each service component with appropriate indicators for tracking significant outcomes.
- We have noted the limitations of this study in terms of tracking adherence rates over time. There may well be a need for that longer-term picture in which case we would recommend that Nai Zindagi consider a longitudinal methodology for any further examination of adherence outcomes over time.

As post-initiation support services evolve and prove their worth it is to be hoped that a less restrictive approach to treatment initiation will emerge for PWID.

We have been impressed by the collaborative arrangements that have been put in place to enable treatment initiation oversight to transfer from clinic to AAU and back again.

Overall the AAU is a high quality, humane, rehabilitation service that plays a significant role in stabilising PWID so that they can adhere to HIV treatment.

We wish to thank people who come to us seeking help and for their willingness to teach us better understand how to serve even better. Without your generous and genuine inputs and teaching Nai Zindagi would not be a learning organisation constantly in transition and evolving to serve better.

Thank You for teaching us.
the Nai Zindagi Team.

World AIDS Day 2015 at the AAU - Staff

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The full version of this report is available at www.naizindagi.org in the section Publication-Research

IN TERMS OF THE CASCADE OF SERVICES FROM PREVENTION THROUGH TO TREATMENT AND CARE, THE AAU SITS AT THE THRESHOLD OF TREATMENT INITIATION

A A U ATTENDEES WERE

43-51

TIMES MORE LIKELY TO BE ADHERENT IN A PERIOD BETWEEN 7-19 MONTHS OF TREATMENT INITIATION

MATTER

RESULTS

ADHERENCE RATES DECLINE OVER TIME MUCH FASTER

60%

OF THOSE REPORTING RELAPSE ARE ALSO REPORTING ADHERENCE WITH HIGHER RATES AMONG CLIENTS OF AAU

44.4%

FOR THOSE NOT ATTENDING AAU

VERSUS

1.7%

FOR THOSE ATTENDING AAU