

Original Research Article

A qualitative exploration among the staff of an antiretroviral therapy center in (central) India regarding factors associated with job satisfaction, patient satisfaction and treatment success

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ABSTRACT

Background: Perception of the staff of an Anti Retroviral Therapy Center (ARTC) was explored regarding the organizational culture of the center with special reference to its effectiveness and efficiency.

Methods: This qualitative exploration was conducted in the ARTC, RDGMC Ujjain. Data were collected during April 2016 and March 2018 by means of 35 self-administered-open-ended questionnaires as well as interviews (3 Focus Group Discussions and 5 Face to Face In-Depth Interviews). Data consisting of the text of the questionnaire responses and transcripts of the interview-sound files were subjected to thematic (content) analysis method.

Results: Several praiseworthy features as well as deficiencies were identified, most important among them were related to counseling, behavior and management of investigations as well as treatment. Emphasis was on finding out effective and efficient ways to prevent LTFUs/ defaults/ delays. In the process of analysis of the data, three themes emerged. These are: theme 1 “general domains for attention and emphasis”; theme 2 “specific areas identified for further improvement” and theme 3 “suggestions for improvement and conclusions of the analysis of the situation”. Several measures were suggested in the interest of the PLHIV and the institution as well as for achievement of the global and national targets.

Conclusions: For improvement in treatment coverage and success, escalation of certain inputs within a timeframe is essential while aiming at certain outputs is also urgently needed simultaneously. Among these, improving the staffing of the ART center in quality and quantity, the job satisfaction of the staff and patient satisfaction are extremely important.

Keywords: Job satisfaction, India, Patient satisfaction, PLHIV, Qualitative research, Treatment refusal

INTRODUCTION

In 2016, the world adopted the United Nations Political Declaration on Ending AIDS.¹ To achieve this, the Joint United Nations Programme on HIV and AIDS (UNAIDS) and the World Health Organization (WHO) have set an ambitious 90-90-90 target for member countries. This entails diagnosing 90% of estimated ‘People Living with HIV/AIDS’ (PLHIV), treating 90%

of those diagnosed using antiretroviral therapy (ART) and achieving viral suppression in 90% of the treated.²

As a part of this great global endeavor, India is also committed to ‘Ending the AIDS epidemic as a public health threat’ by 2030, in line with the United Nations’ Sustainable Development Goals (SDG).^{3,4} With about 2.1 million HIV infected people, India is third globally after South Africa and Nigeria; and had an estimated adult (15-

49 age group) HIV prevalence of 0.26% in 2015.^{1,5-7} The national response to HIV epidemic has been swift and remarkably comprehensive. The history of this response is based on an exceptional dialogue and collaboration between government, communities and PLHIV.⁸

Earlier biomedical approaches (BMAs) for HIV/AIDS prevention included use of condoms, clean injection equipment, blood and blood product related safety and prevention of mother to child transmission (PMTCT). A new BMA was later added with the introduction of ART which has made “treatment as prevention” (T as P) possible besides other advantages.⁹ Some countries have achieved better levels of ART coverage than others. All might be in a position to reach the 2020 and 2030 targets, provided they accelerate the roll-out of ART and of targeted prevention efforts.¹⁰

The free Antiretroviral Therapy (ART) initiative, launched on 1st April 2004 by National AIDS Control Program of India, was a turning point in HIV care. The program adopted a public health approach for provision of ART and has been providing comprehensive prevention, care and treatment services, with a standardized, simplified combination of ART regimen, a regular secure supply of good quality ARV drugs, and a robust monitoring and evaluation system. A three tier model of service delivery for ART has been gradually developed by strengthening the existing health care system. This comprised of ART centers (ARTCs) as central anchor, the “Link ARTCs” for decentralized service delivery, located in the periphery of the ARTCs and the Centers of Excellence (CoE) for highly specialized tertiary care, serving as the centers for the ARTCs.⁸ As a result of a recent sea change in ART provision policy in India, all PLHIVs are now ‘On-ART’ and unlike past there is no ‘Pre-ART PLHIV’ category. After introducing the universal ART, currently the vision of the National AIDS Control Organization (NACO) is that of ‘Paving the way for an AIDS free India’ through ‘attaining universal coverage of HIV prevention, treatment to care continuum of services that are effective, inclusive, equitable and adapted to needs’.³ The goals remain those of the ‘Three Zeros’ - i.e. zero new infections, zero AIDS-related deaths and zero discrimination.³

While availing ART services, the PLHIV face administrative and procedural problems in hospitals/ARTCs which affect their level of satisfaction with service providers (who themselves might be grappling with the problem of low level of job satisfaction and motivation).¹¹ Due to these and many other reasons, the expansions of ART (T as P) programs have brought in new challenges on the top of the old ones.^{5,12} Increased expenditure with enhanced workload is one among these. “Treatment-availability” alone is insufficient for ‘ending the epidemic’; “treatment-refusal” has been found to be a major challenge.¹³ Quality of service delivery needs to be closely monitored and improved where necessary.¹⁴ In-

depth research is needed to understand better the patient, community and provider experience as “TasP” becomes more widely rolled out.¹⁵

In the aforementioned context improving the effectiveness and efficiency of the ARTCs is essential. Frequent assessments and studies of these centers are crucial in achieving the as mentioned goals objectives and targets.

Present paper is the outcome of a qualitative exploration involving collection and analysis of ARTC staff perception data under a self-funded project: “A psychosocial study of the PLHIV in Ujjain city” (RDGMC Ujjain Ethics Committee Version No. 122) sub-study “Exploration of factors influencing the life of the PLHIV”. The aim of this exploration has been to study the staff perception regarding the infrastructure, functioning and performance of their center. The exploration thus included the factors associated with job satisfaction, patient satisfaction and treatment success, various challenges, needs and issues in the day to day functioning and suggestions for improvement.

METHODS

This qualitative exploration was conducted in the ARTC, R.D. Gardi Medical College, Ujjain, MP India during April 2016 and March 2018. All staff members willing to participate in the study were recruited as study participants who belonged to the following categories: medical officers, counsellors, laboratory-technicians, other staff-members (e.g. nursing staff, pharmacist, data manager) and several associated NGO representatives.

These also included some staff-members who substituted any participant-staff-member during the study-period and gave informed voluntary consent for participation. Confidentiality was promised and ensured. The data were collected by means of a self-administered-open-ended-questionnaires (n= 35) as well as interviews [3 Focus Group Discussions (FGDs) and 5 Face to Face In-Depth Interviews (FFIDs)]. All co-authors participated in data collection.

All the interviews were audio recorded and the MP3 sound files were transcribed verbatim. For data analysis, thematic (content) analysis method was used.¹⁶ ‘Meaning units’ and ‘condensed meaning units’ (CMUs) were first developed out of the transcribed texts.^{17,18}

Then, the codes were independently identified manually by the authors SCJ and RJ. Out of the codes, first subcategories and categories came up and finally the themes emerged.

RESULTS

Three themes emerged during the thematic (content) analysis (Table 1). These are: theme 1 “general domains

for attention and emphasis”; theme 2 “specific areas identified for further improvement” and theme 3

“suggestions for improvement and conclusions of the analysis of the situation”. These are being described here.

Table 1: Results at a glance.

Themes	Theme 1: General domains for attention and emphasis	Theme 2: Specific areas identified for further improvement	Theme 3: Suggestions for improvement and conclusions of the analysis of the situation.
Categories	Policies and provisions	Information and communications	Job satisfaction, motivation, better performance and management related
	Job satisfaction, motivation and better performance	Diagnosis and treatment	PLHIV satisfaction related
	Counseling	Behavioral aspects	Treatment success related
	Staff perception regarding the beneficiaries	Team relations and general management	Challenges related to interventions for improvement
	Proper- patient- flow in ARTC (PPF-ARTC)	Infrastructure, incentives and interventions	-
	Patient-provider- relationship (PPR)	-	-

Table 2: Theme 1-General domains for attention and emphasis (some examples of codes and CMUs).

Category	Policies and provisions	Job satisfaction, motivation and better performance	Counseling	Staff perception regarding the beneficiaries	Proper patient-flow in ARTC	Patient-provider-relationship
Codes and CMUs #	Convenience (Location of ARTC is convenient; several crucial services are adjacent). Free of Cost (Advanced investigation facilities are available free of cost; many other free of cost services also available besides the free of cost ART; these and social security provisions must be escalated).	Needs and demands of the staff (Salary be increased; on the job ongoing training is needed; adequate number of staff members; proper work distribution; pat on the back needed now and then). Stress (Job-related stress is high). Staff -stay duration (Duration of stay of the staff members, in the job, is short; leading to frequent vacancies; often filled by untrained inexperienced hands).	C-Role* (Counseling is one of the most crucial services; though often unsatisfactorily imparted) C-Needs* (Regular well trained and adequate number of counselors are needed).	PLHIV awareness (Awareness of the PLHIV should be assessed frequently and be updated; and improved) PLHIV practices (Many PLHIV do not realize the importance of regular treatment and retention in care; often they intend to hide their details and provide wrong address too; sometimes they unfortunately quarrel too)	PLHIV satisfaction (Most of the PLHIV are satisfied) PLHIV expectations (Respect, attention, secrecy, quick disposal, punctuality competence and amiability of the staff, cure and care, charity and social security, travel cost remuneration, cash benefits, low cost food with other needs and amenities too at low cost)	Importance of PPR* (Good PPR is very much important) C-Needs* (Regular, well trained and adequate number of counselors are needed). Mutual trust and mutual relationship (Open communication)

#The Condensed Meaning Units (CMUs) are shown in parentheses; *C-Role= Importance and role of counseling; *C-Needs= Counseling needs; *PPF-ARTC=Proper-Patient -Flow in ARTC; *PPR= Patient-provider-relationship

Theme 1: General domains for attention and emphasis

Categories: Policies and provisions/job-satisfaction, motivation and better performance/counseling/staff perception regarding the beneficiaries/proper patient flow in ARTC/ patient-provider relationship (Table 2).

Policies and provisions were admired and at the same time better working conditions, remunerations and adequate staff strength were demanded for a higher level of job satisfaction and motivation. Several good and bad aspects related to the thinking and practices of the PLHIV were described. Besides the issues related to counseling, patient-provider relationship and proper-patient-flow or beneficiary flow in the ARTC as well as other associated

services in the campus also came up as main areas for attention and emphasis.

“Policies and provisions are admirable. Location is convenient. Proximity of the ART center to several other service providing centers and convenient accessibility are there. Moreover, two important departments (Dermatology + STD Clinic and Pulmonary Medicine) are just adjoining. Counseling, proper guidance and advanced investigation facilities are available free of cost to all PLHIV while ART drugs are also being given free of cost. The guidance for living life correctly is also being given to the PLHIV. All these must be improved further.” Participant 3 FGD-2.

“The services which are neither available to nor affordable for the PLHIV in the private hospitals are provided here” Open ended questionnaire no. 15.

Theme 2: Specific areas identified for further improvement

Categories: Information and communications/Diagnosis and treatment/Behavioral aspects/Team relations and general management/Infrastructure, incentives and interventions (Table 3). As shown in the Table 3, this theme has emerged from several subcategories which gave rise to 5 above mentioned categories; and forms a passage between the previous and the next theme.

Table 3: Theme 2-Specific areas identified for further improvement (examples of subcategories too).

Category	Information and communication	Diagnosis and treatment	Behavioral aspects	Team relations and general management	Infrastructure incentives and interventions
Subcategory	Counseling	Doctors' competence and dedication	Dedication and empathy	Cooperation and coordination	Waiting space facilities and the need to improve ARTC ambience
	Proper guidance for work up during the PLHIV-visits	Some of aspects of investigation process and referral	Behavior with PLHIV	Harmony at work and work-distribution	Staff vacancies
	Monitoring of stigma, discrimination and social -security	Follow up and retrieval of the irregular PLHIV	Deputation	Monitoring, supervision, logistics and documentation	Supportive interventions (Codes: Training, staff -incentives, PLHIV-incentives, feedback, public relations and publicity, fieldwork)
Concerned with	Mainly auxiliary staff; doctors' active involvement is expected	Mainly Doctors; with the help of the entire team	Entire team	Entire team	Mainly dependent on higher administrators' decisions counsel of middle managers and demands of the entire team

Table 4: Theme 3-Suggestions for improvement and conclusions of the analysis of the situation.

Category	Job satisfaction, motivation, better performance and management related		PLHIV satisfaction related	Treatment success related	Challenges related to interventions for improvement
Subcategory	Staff personal needs and demands related	Securing PPF- ARTC	Beneficiary needs and demands related	Improving counseling	Supports
	Training and CME	Improving general check-up and specific investigations’ processes	Further improving behavior with the PLHIVs	Improving documentation, logistics and follow up	Society
	Monitoring and supervision related	Improving coordination and communications	Assuring privacy and secrecy	Flexibility in medication frequency needed	Self

*PPF-ARTC = Proper Patient Flow in the ARTC

The bottom-row Table 3 depicts the relationship of the categories of this theme with particular staff category. This theme is about some 'crucial specific areas', in the context of the 'main areas' of theme 1.

Some deficiencies came up in the perspective of a wider domain of various facilitators and barriers. The participants especially emphasized on the need to improve ambience, staff salary, work distribution and

staff strength (their number, competence and attitude) besides information and communications.

“More counselors needed. There are also vacancies of the ORWs (outreach workers for the PLHIV follow-up etc.) and also the data entry operators are needed”. Open ended questionnaire no. 5. Need for improvement in harmony at work and behavior with the PLHIV were as well emphasized along with the need to improve logistics. Doctors’ competence and dedication, staff

regularity, punctuality, work distribution, deputation in the absence of any member and record keeping also emerged as areas which need further improvement. Investigation report related problems were also mentioned.

“Investigation report related problems keep coming up. For example, delay in investigation reports and then investigation communication deficiencies. There is lack of investigation related advice to the PLHIV.” FFIDI-3

Table 5: Category: Job satisfaction, better performance and management related (suggestions for improvement and conclusions of the analysis of the situation).

Subcategory	Staff personal needs and demands related	Training and CME	Monitoring and supervision related	Improving general check-up and specific investigations’ processes	Improving coordination and communications
Codes	Filling the vacancies (two counselors were needed at the ART Centre and for field work ORWs were also needed).	Interest in training/CME* (Demand for on - the- job- training/CME locally and out of station)	Routine monitoring	Clinicians’ time, attention and solicitude	With PLHIV (Inform and motivate the PLHIVs / The PLHIVs should know which tests are being done and their importance)
	Staff incentives (adequate salary, positive reinforcement, proper guidance, sufficient staff strength)	Advantages of training/ CME	Supportive supervision	Competence and quality	Within the ARTC (Proper patient flow; coordination among the staff)
	Problem solving (work-audit, monthly listening to the problems of the staff, solutions for staff mutual differences, work-load, paper-work, target-related-problems)	(higher motivation, better performance, greater job satisfaction, enhanced safety and security, better mutual relations, coordination and harmony; richer quality of life; improvements in patient satisfaction and treatment success)	Monitoring the effectiveness of the improvement efforts	Time factors (Limited time for investigations; Reporting delay)	Within the campus (Inter-departmental coordination in the campus)
	Team spirit (staff morale and mutual coordination, cooperation, war level implementation honestly and earnestly)		Clinical monitoring (Proper medical checkup; Proper case-work)	Place factors (Investigation place perplexity; Problem of moving around for tests and their reports)	In the field (Coordination with Primary Health Centers and District Health Administration)
	Subcategory: Space related (Codes: Waiting space; Counseling chamber; Medical Officers’ chambers; Other chambers and spaces)		Ensuring better logistics (supply of materials to be as good as that of medicines)	Cost factors (Investigation costs)	Field work too (Field work also needed particularly for follow up)

CME=Continuing Medical Education; LTFU**= Lost to Follow-Up

Theme 3: Suggestions for improvement and conclusions of the analysis of the situation

Categories: Job satisfaction, motivation, better performance and management related/PLHIV satisfaction related/Treatment success related/Challenges related to interventions for improvement (Table 4, 5 and 6).

Like theme 2, and unlike theme 1, the categories of theme 3 have emerged from several subcategories. Details of the first category have been shown in Table 5 while those of the remaining three categories have been depicted in Table 6. The study participants have suggested a wide range of measures - for improvement in infrastructure

well as ways of working - in their own interest, in the interest of both the PLHIV and the institution, and for achievement of the global targets. These wide-ranging suggestions were about training and CME, improving counseling, coordination, information, communications, logistics, investigation and record keeping, monitoring and supervision and the suggestions for addressing the 'lost to follow up' (LTFU) problem.

"Targets and aim can be achieved if ART centers services are improved," FFIDI-1.

"The services provided to the PLHA are OK, yet these must be improved further and should be made more systematic (adhik vyavasthit)." Open ended questionnaire no. 3. They suggested PLHIV-incentives along with staff-incentives.

Table 6: Suggestions for improvement and conclusions of the analysis of the situation (Continued from Table 5).

Category	PLHIV satisfaction related			Treatment success related			Challenges related to interventions for improvement		
Subcategory	Beneficiary needs and demands related	Further improving behavior with the PLHIVs	Assuring privacy and secrecy	Counseling be improved	Improving documentation, logistics and follow up	Flexibility in medication frequency	Supports	Society	Self
Codes	At the ARTC	More amiability and respect	Proper ambience	Strengthening counseling	Systematic documentation**	Priority in flexibility to the regular	Resource constraints	Challenging socio-cultural aspects	Cooperation, coordination, communication challenges
	ARTC support in social security benefits	Due attention for cure and care	Space and design for securing privacy	Monitoring counseling	Follow up***	Two or three- month medication to the regular PLHIV	Improvement in general management	Social action related challenges	Lack of job satisfaction and motivation among the 'mercenaries'
	ARTC support in family and social life	Avoiding unnecessary delays	Maintaining secrecy	Intensive counseling for the new PLHIV*	Material and medicine supply monitoring	Home-visits in case of increased duration	Funding-procurement-enhancement	Image, good press and publicity and donation related challenges	Lack of discipline among multiple stakeholders

Examples of some CMUs (respective codes in bold letters): *Intensive counseling for the new PLHIV: One staff member exclusively for guiding the new PLHIVs; Special time and attention for first and second counseling. **Systematic documentation: White card be filled up fully and properly; ***Follow up: Retrieval of the irregular and LTFU by means of cell phone and SMS use

"PLHIV need to be properly informed about the implications of this disease. They need to be motivated in halting and reversing the epidemic. The health service providers at the center (ART -center) need to commit themselves to achieve this goal. We should make concrete action plan for the regular follow up of every registered PLHIV and cell phone can be a good medium. authors can send SMS and we should talk to the PLHIV via their cell phone number available with us." Open ended questionnaire no. 9.

"More spacious waiting space is needed and there we must have all sorts of basic facilities like food, water, toilets and attractive and effective displays for PLHIV education." FFIDI-2.

In the context of staff incentives, their emphasis was on increase in staff strength, provision of better remunerations and improving working conditions and facilities (Table 4 and 5). These interventions and

incentives have been described by them as investments in the interest of the entire nation and world.

The participating staff members were very much interested in the training and Continuing Medical Education (CME) programs if any such opportunities are extended to them. Several advantages of training and CME were brought up by them (Table 5). Their suggestions about patient satisfaction and treatment success and the analysis regarding challenges have been shown in Table 6.

DISCUSSION

Present paper is about certain aspects of the ARTC-staff-perception-data, collected by us while exploring factors influencing the life of the PLHIV. These are mainly related to job-satisfaction and motivation of the service-providers, patient (PLHIV)-satisfaction and treatment-success. Our findings are predominantly about analysis of the situation and suggestions for improvement in these

domains especially in the fields of access and adherence to treatment, as well as retention-in-care.

It has been earlier documented that staff perceptions and experiences are affected by the specific workplace context influences.¹⁹ In HIV/ AIDS prevention and in improving the quality of life of the PLHIVs, policies and provisions play a significant role.²⁰ The participants in our study discussed the role of policies, provisions, guidelines/instructions at global, national and local (study area) levels. In this context, need for expansion of HIV-testing was also emphasized by them and recent policy changes related to relaxation of ART eligibility were admired, as has happened globally.²¹⁻²⁴ 'Four Frees and One Care' policy in 2003 and the relaxation of ART eligibility in 2010 have facilitated the initiation of treatment for the PLHIV in China.²¹ On the other hand, concerns about increase in the workload after expansion of ART eligibility and need of more resources and better management have also dominated the discussions on policies and provisions in our study. Similar to our findings, in a previous study, health care workers expressed concern about increased workload resulting from the expansion of the ART eligibility.²⁵

Foregoing issue is closely related to job-satisfaction and motivation. Participants in our study brought up several personal needs in this connection, mentioned stress and discussed short duration of stay of some of the functionaries at the center (Table 2). For effectiveness and efficiency of the ART center, satisfaction and motivation of the staff as well as that of the PLHIV are essential.²⁶ Efforts to provide and scale-up ART to all PLHIV must be accompanied by interventions that address structural and individual level access barriers (which cannot be done without high levels of job satisfaction and motivation of the ARTC staff).²⁷ Concerns such as low salaries, extended working schedules, lack of training opportunities and inadequate infrastructure for service provision have been documented as linked to low job-satisfaction and motivation.²⁵ In a recent qualitative study from (south) India, job-perception of counselors was explored. Their study found poor job-satisfaction along with problems related to the pay scale and shared confidentiality, refresher training and targets set for counseling and testing.²⁸ We also found that Integrated Counseling and Testing Center (ICTC) for HIV testing and ARTC for HIV treatment exist in close association. This is a praiseworthy feature, as the staff of both the centers is working together in the interest of the PLHIV, yet its strength depends on stability of staff which again depends on the job-satisfaction.

ARTC staff members in present study also brought up importance of patient-provider-relationship and emphasized on mutual trust and mutual relationship especially open communication among the staff and the PLHIV (Table 2). These findings are similar to those of previous qualitative studies.²⁹⁻³¹ Expectations of the

PLHIVs were also discussed in detail by the participants in our study (Table 2). PLHIV have been reported to expect effective collaboration between healthcare providers and support group members, for improvement in their quality of life.³² Results of a very recent thematic analysis based study, like ours, conducted in China, suggest a continued need for careful management of patient expectations and community engagement.³³ In spite of their various expectations related to care and cure, many PLHIV fail to understand the importance of remaining in continuous care.²⁶ In fact, their knowledge, attitude, sense of responsibility and ultimately prevention practices are crucial in treatment success.³⁴ Innovative interventions to retain ART patients in effective care are an essential priority for the ongoing HIV response.²⁶

Improvement related participant-suggestions in our study (Tables 3 to 6) had the focus on improving access, adherence and retention-in-care through a PLHIV friendly, effective and efficient ARTC. Several measures have been described in the published literature for improving access, retention in care and adherence to treatment. For example, a positive and welcoming environment in the ART center for the PLHIV, more awareness of and information about HIV infection, better collaboration and navigation between the services, case management, outreach, social services, providing mental health services and substance use treatment concurrent with HIV care, decreasing unmet medical and social needs.³⁵ Guidelines to improve retention in care have also been developed and disseminated but as yet not well researched.³⁵

Access to ART can be increased by improving community education, reducing stigma and discrimination, increasing the number of service providers at ARTCs, bringing ART nearer to where people live.³⁶ In the present study, participants have suggested proper flow of patients in the ARTC (Table 2 and 5) and flexibility permitting dispensing of ART medicines for more than one month at least for more regular patients (Table 6). A study aimed at improving adherence in Uganda has also stated that easily implemented simple and feasible interventions designed to reduce clinic crowding are effective ways of improving adherence to ART. The interventions in their study comprised of appointment systems, patient-fast-tracking, increasing medication days etc.³⁷ Many participants in the present study have suggested flexibility in medication frequency (Table 6). In the authors' opinion, PLHIV, who are provided more than one month of ART, may be contacted by cell phones or alternately visited by means of a general mobile health care facility, at monthly intervals. Precautions should be observed, taking care of sociocultural aspects. Some challenges related to interventions for improvement were also brought up. These included socio-cultural aspects and social action besides the resource constraints (Tables 1, 4 and 6). According to a previous study for addressing HIV related inequities at the social-level, the key challenges are to

work with local actors, such as community-based-organizations and to use research to inform action.³⁸ Authors did not come across any such expression in the present study. In developing strategies to improve ART adherence, it is crucial to consider socio-cultural factors such as family, expectations, gender/sexuality, affect, relationship with HIV, work, social support and networks, and stigma and discrimination etc.³⁹ More spacious waiting area than at present and using the opportunity of visit and waiting in PLHIV education was another set of suggestions given by the ARTC staff (Table 5 and 6). Such arrangements are considered innovative and youth friendly and hence worth investing in. In an earlier study, PLHIV attending clinics with a waiting area intentionally designed for engagement (e.g. health literature, electronic media, décor etc.) have been reported as “more likely to be retained in care”.⁴⁰

Participants in present study brought up several advantages of imparting training and increasing the level of knowledge and skills (Table 5). On-the-job training for adherence- counselors and support-staff has earlier been reported as a requirement for optimum job performance.⁴¹ The level of HIV/AIDS occupational risk has also been found to be directly associated with the level of knowledge of the disease.⁴² In order to optimize the operationalization of the latest guidelines for ART, in addition to adequate resources, relevant training opportunities, and innovative strategies are needed.²⁵ Similar to the findings of the present study, a previous study in India has also reported willingness and interest of the staff and students about participation in training programmes which enable the service providers in providing better and more efficient treatment to HIV/AIDS patients.⁴³ Education and training programs strengthen HIV/AIDS care, prevention, treatment and management skills among healthcare professionals, addressing problems such as HIV Drug Resistance (HIVDR).⁴⁴ Training programs should include interactions with PLHIV from high risk groups.⁴⁵ Policymakers should ensure that trained human resources and infrastructure are appropriately proportionate to the client load in the public health systems in general and the ART centers in particular.⁴⁵ Previous studies internationally have also highlighted that working with PLHIV may lead to nurses' stress and burnout while support and supervision can properly address this problem.⁴⁶

Findings of the present study bear some similarities to those of earlier qualitative studies conducted in various resource limited settings. For example “actively monitoring intervention effectiveness” and “more resources and supports are needed”, “secrecy is needed”, “flexibility needed in medication quantity being dispensed”, “multi-pronged, multi-leveled interventions” should be introduced”, “the connection and coordination between ICTC and ARTC must be improved”, “improvement in service quality and improving counseling and communication”, “continuing programs

of personnel training.”^{29,47-55} These also include cell phone use for retrieval of irregular PLHIV better supervision, educational-sessions, staff meetings, interventions to improve staff motivation and appropriate patient-provider interactions.^{13,19,30,31,52,53} Findings of present study are dissimilar as well in finer details from those of some studies. For example, authors did not find that staff members shared with the broader society certain negative attitudes toward some high-risk subgroups of PLHIV; preference to government workers particularly teachers training by mentorship and gender-based-health-inequities in HIV care.^{45,55,56}

A recent review has assessed several interventions. Those most widely studied and implemented to date involve peer counseling, adherence clubs, and short message service (SMS). Many additional interventions could have an important impact on ART adherence with further development, including standardized counseling through multi-media technology, electronic dose monitoring, decentralized and differentiated models of care, and livelihood interventions. Optimal targeting and tailoring of interventions will require improved adherence measurement.⁵⁷ In another recent study model of sociocultural dimensions indicated that factors associated with PLHIV expectations had influenced their adherence to treatment.³⁹ “Alternate HIV-care delivery models” have also been researched of late. One such model is community-ART delivery which refers to decentralizing HIV-related care and treatment outside of health facilities.⁵⁸ This can be a solution to several current issues including the problem of workload.

Strength: In the present study, in all the three interconnected themes, “attention”, “emphasis” and “ideas towards further improvement” occupied a central place. In any future planning for improvisation, this exploration will be useful as a situation analysis.

In the perspective of this widely researched topic, analysis of the situation and suggestions given for improvement by the ARTC staff members, are significant for developing insights not only for local use but for other similar service providers in the resource limited settings.

Present study has been conducted with some limitations too. These are: restriction to qualitative research method, selection of only one ARTC and inclusion of only one category of the stakeholders (thus non-inclusion of the higher levels of administration, PLHIV, their attendants and general public). These limitations necessitate further research.

CONCLUSION

In this perception-exploration, several issues and perspectives related to job- satisfaction, patient-satisfaction treatment-refusal and treatment-success were brought up by the study-participants. Except a few, most policies were described by the participants as

praiseworthy and provisions admirable. At the same time higher salary and better facilities were emphasized. For these and other needs, participants stated that, more resources are needed, especially well-trained and highly - motivated adequate number of human resources.

Recommendations

More discipline is needed among the staff as well as the PLHIV; whereby punctuality and amiability of the staff and regularity and cooperation of the PLHIV are essential. For improvement in treatment coverage and success, increase in certain inputs within a time frame is essential while aiming at and monitoring certain outputs is also urgently needed simultaneously. Among these, improving the staffing of the ART center in quality and quantity, the job-satisfaction of the staff, patient - satisfaction and above all the counseling of the PLHIV are extremely important. The praiseworthy features should be maintained while problem areas and barriers must be properly and adequately addressed urgently, utilizing the suggestions given by the participants of this study.

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