
PUBLIC HEALTH RESEARCH

Evaluation of Integrated Counselling and Testing Centres (ICTC) for HIV in a District of India

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ABSTRACT

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Introduction	ICTCs provide a critical entry point for prevention, care and support for both people affected by HIV/AIDS and general population. The study was conducted with the objective of evaluating ICTCs in terms of infrastructure and staffing, services provided, level of utilization and quality of counselling.
Methods	The structure and process evaluation of 13 ICTCs under National AIDS control programme III (NACP III) was carried out in a Coastal District of South India. The evaluation was carried out using UNAIDS Tools between July and September of 2010.
Results	Twelve out of 13 ICTCs (92%) had adequate infrastructure and staff. Most of the general clients (75%) attending ICTCs were provider initiated and 84.5% of antenatal women in the district attended pre-test counselling and also underwent HIV testing. Twenty six pre-test counselling sessions and 12 post test sero-positive counselling sessions were observed. Pre-test counselling content assessment revealed that only 57.4% of sessions address all the issues whereas, 79% of post-test sessions addressed most of the issues during counselling. Counsellors' skills assessment information gathering and information giving were found to be poorly done. It was found that post test counselling sessions were not conducted for clients with HIV negative report.
Conclusions	The aspects of ICTCs such as services provided at the centers, utilization of services by the clients, infrastructure and staffing pattern were found to be adequate. Counselling forms the vital component of the ICTC needed improvement and post test counselling should be mandatory to all the clients.
Keywords	Evaluation - Integrated Counseling and Testing Centers (ICTC) - UNAIDS tools - South India.

INTRODUCTION

The national adult prevalence of HIV in India is approximately 0.31 percent, amounting for 2.39 million people affected by HIV/AIDS.¹ In response to AIDS situation in India, National AIDS control organization (NACO) was established in the year 1992 and National AIDS control project (NACP) phase I (1992-1999) was launched with the objective to slow down the spread of HIV infections to reduce morbidity, mortality and impact of AIDS in the country. During NACP phase II (1999-2006), the programme focused on behavior change, decentralization and increased involvement of the non-governmental organizations (NGOs). The focus of NACP Phase III (2007-2012) is on scaling up interventions to prevent new infections, as well as provide care, support and treatment services to People Living with HIV/AIDS (PLHA) and their families.²

Voluntary Counselling and Testing Centres (VCTC) services and Prevention of Parent-to-Child Transmission of HIV/AIDS (PPTCT) services were started in India during the year 1997, the earlier VCTCs and facilities providing PPTCT services having been now remodeled to deliver integrated services to all clients under one roof and renamed as Integrated counselling and testing centres (ICTCs). These ICTCs provide a critical entry point for prevention, care, support and treatment for both people affected by HIV/AIDS and general population. The centres facilitate personal and more informed decisions about HIV testing. They also provide referrals to appropriate facilities and promote more informed choices for the future.³

Udupi district is one of the coastal districts of Karnataka, South India with a population of 11,77,908.⁴ The average literacy rate is 86.29%, higher than the national average of 74% and a commendable female literacy rate of 81.41%.⁵ The district is one of the districts in India with a favorable sex ratio of 1093 females per 1000 males.⁶ The major occupation of men folk is agriculture and fishing while the women folk work in paddy fields, sell fish or roll beedies (A local form of smoking tobacco). The proportion of clients tested positive at ICTC during 2010 at Udupi was 6.18% which higher compared to Karnataka state average of 5.58%.⁷ The first Voluntary Counselling and Testing Centre (VCTC) was started in a medical college at Udupi district in the year 1997 followed which VCTCs were established at district general hospital and Taluk hospitals in 2002. In the year 2007 the centres were renamed as ICTCs under NACP III and additional ICTCs were started at Community Health Centres (CHC) and Primary Health Centres (PHC). A total of 14,129 clients were counselled at 13 ICTCs between April-December 2010 against the target of 18,839.⁷

All the health programmes need regularly evaluated not only to assess the performance but also provide information to support health care providers, administrators and policy makers for better service delivery. Although, there have been studies addressing issues related to various aspects of voluntary counselling and testing (VCT) services related to client satisfaction,^{8,9,10} providers satisfaction^{10, 11} and evaluation of prevention of mother to child transmission services.¹² The data on comprehensive evaluation of Integrated Counselling and Testing Centres at a district level addressing issues related to quality of services, utilization and facilities available is limited. Hence, the study was conducted with the objective of evaluating ICTCs in terms of infrastructure and staffing, services provided, level of utilization and quality of counselling.

METHODS

A Cross sectional facility based structure and process evaluation was carried out at Udupi district between July-September 2010 at all the 13 ICTCs functioning under NACP III. The various components of ICTCs evaluated are shown in Table 1. Data was collected from 2 ICTCs located in a Medical college hospital, 2 centres at District general hospital, 2 centres at Taluk hospitals, 4 centres at CHC, and 3 centres at PHC. The tools developed by UNAIDS to evaluate Voluntary counselling centres were used to collect the data. These tools were developed to help HIV programmes evaluate and were tested in developing and industrialized countries.¹⁰ They were designed to be used in a flexible manner, to be adapted and modified according to the needs of the service being evaluated, acknowledging that some questions might be inappropriate at a specific site and might need to be removed or reworded.^{10,13} Tool number 2, 4a and 4b¹³ were adapted following an pilot study in the study area to collect data with respect to services provided; Utilization of services; Counseling content assessment and Counsellor Skills assessment. The data on infrastructure and staffing pattern was collected using the tool developed based on guidelines for ICTCs provided by National Aids Control Organization.³ Each counsellor was assessed twice during two different pre-test counselling sessions for their counselling skills and counselling content. Whereas, it was possible to assess only one session per counsellor during post test counselling of new Sero-positive clients. HIV data for the months of July to September 2010 was obtained from District AIDS Prevention & Control office (DAPCO). The collected data was entered and analyzed using Statistical Package for Social Sciences (SPSS) version 11.5. The data is presented using descriptive statistics in the form of tables.

Table 1 The Structural and Process Components of ICTC Evaluated

Structural components	Process components
Infrastructure	Utilization of services by the clients
Counselling rooms	
Providing privacy	Linkages and referrals
Waiting area	
Minimum required furniture	Assessment of HIV Testing Schedule and Quality Control
Nevirapine stocks	
Aids for communication	Assessment of Counselling Content
Equipments and consumables	Pre-Test
	Post-Test
Staffing	Assessment of Counsellors Skill
ICTC managers (Medical officers)	Pre-Test
Counsellors	Post-Test
Laboratory technicians	

Ethical issues: Before commencing the study, ethical clearance was obtained from Kasturba Hospital Ethics Committee (KHEC), Manipal and approvals from district health authorities and District Aids control officer were obtained. At each ICTC, additional permission from concerned ICTC managers (medical officers) was also obtained. A written informed consent was obtained from clients and counsellors before assessing counselling content and counsellors' skills assessment.

RESULTS

Assessment of Infrastructure and Staffing

A total of 13 ICTCs were evaluated of which 11 (85%) centres had adequate counselling rooms, 12 (92%) centres had minimum required furniture, equipments and consumables. Adequate waiting area and sufficient privacy during the counselling sessions were provided at 12 (92%) sites. Twelve centres (92%) had adequate staff and the staff included a ICTC managers (Medical officers), a counsellors and a laboratory technicians. Only the ICTC at District general Hospital had two counsellors as compared to only one counsellor at all the other centres. Only 6 centres (46%) had Nevirapine stocks.

Assessment of Counselling Services

The counselling (pre-test & post-test) and HIV testing services were provided at all the centres. The clients attended pre test counselling followed by testing and the post test counselling sessions were scheduled for the afternoon sessions at all the centres. Counsellors working at the ICTC centres located in CHCs and PHCs had to visit 4-6 other PHCs to conduct counselling sessions. The ICTCs function between 9 am - 4.30 pm six days a week.

a. Referrals & Linkages

A two way referral system existed between medical services (medical, surgical and other departments) at all the 13 centres whereas, at 12 out of 13 centres referrals were made to Mother and Child health (MCH) and TB services. Only few referrals 4 out of 13 were made from ICTCs to Sexually Transmitted Infections (STI) clinics, 3 out of 13 psychiatry clinics, 3 out of 13 NGOs' with occasional referrals from traditional healers 5 out of 13.

b. Assessment of HIV Testing Schedule and Quality Control

Rapid testing kits were used at all the 13 centres. These testing kits were stored (+2° to +8° C) in the refrigerators. All the clients underwent Coomb AIDS testing and those samples showing positive results were subjected for further testing with two more rapid tests. The clients were declared HIV positive only if all the three tests were positive. In case one of the two rapid tests the clients were considered as indeterminate and samples were sent to national reference laboratory. Whereas, if the 2nd and 3rd are negative it is reported as negative. All the centres participated in External Quality Assessment Scheme (EQAS) and received coded samples from the reference laboratories twice a year. Additionally, 20% of all positive samples and 5% of all negative samples collected during first week of every quarter were sent to the state reference laboratories.

Level of Utilization of ICTC Services by General Clients

From Table 2 it could be observed that a total of 4829 general clients (non- Antenatal clients) attended the counselling between July to September 2010. Out of these, 76% (3671) were provider initiated and 24% (1158) were client initiated. An overall dropout rate of 3.6% (176) of which 4.8 % (56) among client initiated group as

compared to 3.27% (120) among provider initiated group. Sero-positivity of 3.7% (180) and 1.3% (61) was observed among client initiated and provider initiated groups respectively. Among the general clients attending pre-test counselling, 59% (2956) were males and 41% (1973) were females. It was noted that 99% (4784) of the clients attending pre test counselling underwent HIV testing and 96.5%

(4660) attended the post test counselling. Overall sero-positivity was 5.03% (241) with 3.2% (154) males and 1.8% (87) females testing positive. Age group of 35-49 years accounts for 50.6% (122) followed by 26.5% (64) among 25-34 years followed by other age groups.

Table2 Level of Utilization of ICTC Services in Udupi District by General Clients between July-September 2010

Counselling & Testing Services	N=4829		
	Client Initiated [n (%)]	Provider Initiated [n (%)]	Total [n (%)]
Attended Pre Test Counselling	1158 (24.0)	3671 (76.0)	4829 (100)
Tested for HIV	1158 (23.9)	3630 (75.1)	4788 (99.1)
Post Test Counselling	1105 (22.9)	3555 (73.6)	4660 (96.5)
Received Test Results	1102 (22.8)	3551 (73.5)	4653 (96.3)
Sero-Positivity among HIV tested clients	61 (1.3)	180 (3.7)	241 (5.03)

Level of Utilization of ICTC Service by Antenatal Care (ANC) Attendees

A total of 3017 antenatal women were registered in the district between the months of July to Sept 2010. Among them 84.5% (2550) attended pre-test counselling and underwent HIV testing. Among women who underwent HIV testing, 96.7% received post test counselling of which 2.7% (69) antenatal clients did not collect the test report and further 0.6% (15) clients who collected the test report did not turn-up for post test counselling. The sero-positivity among ANC clients was 0.47% (12). Of the 12 sero-positive delivered with live births were conducted during the study period, all mothers and baby pairs received Nevirapine.

Core Indicators for ICTC (Including PPTCT)¹⁴

i. Core Indicator I.e.3: Number and percentage of persons who tested positive for HIV by Age for general clients

Of the total 4784 general clients who underwent testing 33% (1600) of the clients belong to 35-49 years followed by 30% (1459) among 25-34 years, 20% (960) among >50, 13% (632) among 15-24 yrs and 3%(154) among <14years.

ii. Core Indicator I.e.5: Number and percentage of persons who tested positive for HIV by Age

A total of 241(5.03%) clients were diagnosed to be HIV positive following 3 rapid tests of which 50.2%(121) belong to 35-49 years, followed by 26.5%(64) among 25-34 years, 12.8%(31) among ≥ 50years group, 6.6%(16) among 15-24 years and 3.7%(9) among <14 years age groups respectively.

iii. Core Indicator I.e.6: Number of persons receiving pre test

counselling/information by Gender (n=4784)

Fifty nine percent (2856) of men and 41% (1973) of women attended pre test counselling.

iv. Core Indicator I.e.7: Number and percentage of persons accessing ICTC services who are referred from Revised national Tuberculosis Programme (RNTCP) centres.

Only 2.75% (133) clients referred to ICTC were from RNTCP

v. Core Indicator I.e.8: Percentage of HIV positive persons referred to Anti Retroviral Treatment (ART) centre by Gender (n=4784)

Of the 241 clients who were sero-positive all of them (100%) were referred to ART.

vi. Core Indicator I.e 10: Percentage of ICTC reporting inadequate quantities of HIV test kits

All the 13 centres (100%) reported adequate quantity of HIV test kits

vii. Core Indicator I.e 11: Number and percentage of HIV infected pregnant Women and Newborns receiving ARV prophylaxis

Totally 12 sero-positive mothers delivered during the last 3 months at Udupi district. All (100%) the 12 mother and baby pairs received ARV prophylaxis.

Pre-Test Counselling Content Assessment

A total of 26 pre-test counselling sessions were assessed. From Table 3, it could be noted that

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during pre test counselling session's components such as the reason for attending the session (92.3%), Informed consent/dissent given freely (100%), knowledge about HIV & modes of transmission explored (84.6%) and follow-up

arrangements (80.7%) were covered in majority of the sessions. Only 57.4% of the counselling sessions addressed all the issues.

Table 3 Pre test counselling sessions observed where counselling content was adequately dealt

n=26	
Pre-Test Counselling Content	YES [n (%)]
Reason for attending discussed	24 (92.3)
Knowledge about HIV and modes of transmission explored	22 (84.6)
Misconceptions corrected	13 (50.0)
Assessment of personal risk profile carried out	15 (57.7)
Information concerning the HIV test given (e.g. process of testing, meaning of possible test results, window period)	15 (57.7)
Understanding checked	11 (42.3)
Discussion of meaning of test results and possible implications	10 (38.5)
Capacity to cope with positive result	4 (15.4)
Discussion of potential needs and available support	8 (30.8)
Discussion of a personal risk reduction plan	14 (53.8)
Time allowed to think through issues	12 (46.2)
Informed consent/dissent given freely	26 (100)
Follow-up arrangements discussed	21 (80.8)
Adequate time for questions and clarifications	14 (53.8)
Cumulative Percentage	57.4%

Post-Test Counselling Content Assessment

A total of 12 post test counselling sessions of seropositive clients were assessed. As shown in Table 4 aspects such as giving results in simple and clear manner to the clients(100%), discussion of follow-up care and support(100%), follow-up plans discussed (100%) and referrals made whenever

necessary (100%), dealing with immediate emotional reactions(83.33%), immediate plans, intentions and actions reviewed (83.33%), were adequately covered during the counselling sessions. A cumulative 79.2% of the counselling sessions addressed all the issues.

Table 4 Post test counselling sessions observed where counselling content was adequately dealt

n=12	
Post Test Counselling Content	YES [n (%)]
Results given simply and clearly	12 (100)
Time allowed for the result to sink in	7 (58.3)
Checking for understanding about the result given	9 (75)
Discussion of the meaning of the result for the client	8 (66.7)
Discussion of the personal, family and social implications including who, if any, to tell	8 (66.7)
Discussion of personal risk reduction plan	10 (83.3)
Dealing with immediate emotional reactions	10 (83.3)
Checking adequate immediate support available	8 (66.7)
Discussion of Follow-Up Care and Support	12 (100)
Options and resources identified	8 (66.7)
Immediate plans, intentions and actions reviewed	10 (83.6)
Follow-Up plans discussed and referrals where necessary	12 (100)
Cumulative Percentage	79.2%

Pre Test Counsellors Skill Assessment

As shown in Table 5, 26 pre test sessions were observed for counselling skills. The skills were scored as 1 if any aspect of the skill needed

improvement and 2 if satisfactory. Major aspects of Interpersonal skills such as engaging them in conversation (65.4%) and Being supportive & non judgmental (77%) were satisfactorily done by most

of the counsellors. In case of Information gathering only aspects such as use of appropriate balance of open and closed ended question (80%) and probing appropriately (57.7%) were done satisfactorily. With respect to Information giving, the information

given was simple and clear (80.7%) and counsellors had up-to-date knowledge (73%) were done satisfactorily.

Table 5 Pre Test Counsellors Skill Assessment

Skills Evaluated	n=26	
	Satisfactory n (%)	Needs Improvement n (%)
Interpersonal Skills		
Greets Clients	6 (23)	20 (77)
Introduces Self	2 (7.7)	24 (92.3)
Engages Client In Conversation	17 (65.4)	9 (34.6)
Listens Actively	5 (19.2)	21 (80.8)
Is supportive and Non Judgmental	20 (77)	6 (23)
Information Gathering		
Uses Appropriate Balance of Open and Closed Ended Questions	21 (80.8)	5 (19.2)
Uses Silence Well to Allow Self Expression	5 (19.2)	21 (80.8)
Seeks Clarification about Information Given	4 (15.4)	22 (84.6)
Avoids Premature Conclusions	4 (15.4)	22 (84.6)
Probs Appropriately	15 (57.7)	11 (42.3)
Summarizes Main Issues Discussed	2 (7.7)	24 (92.3)
Information Giving		
Gives Information In Clear and Simple Terms	21 (80.7)	5 (19.3)
Gives Client Time to Absorb Information and to Respond	5 (19.3)	21 (80.7)
Has Up-To-Date Knowledge about HIV	19 (73)	7 (27)
Repeats and Reinforces Important Information	4 (15.4)	22 (84.6)
Checks for Understanding /Misunderstanding	4 (15.4)	22 (84.6)
Summarizes Main Issues	5 (19.3)	21(80.7)

Post Test Counsellors Skill Assessment

Twelve post test counselling skill were assessed (clients counselled were sero positive). During the sessions all the components of Interpersonal skills, Information gathering and Information giving were done satisfactory except for checking for understanding of the client (4/12) and summarizing the main issues (0/12) needed improvement. It was not possible to observe equal number of pre test and post test counselling sessions as test results were issued to the clients without post-test counselling in case of negative report.

DISCUSSION

The evaluation helped in identifying some of the strengths and weaknesses of the ICTCs functioning at a district level. The evaluation revealed satisfactory results with respect to infrastructure and staffing pattern. Only two ICTCs did not have adequate area for counseling due to the temporary nature of these centres as the ICTCs were under construction. A good two way referral system existed between Medical services, MCH, ART centre and TB services. Only few referrals were received from STI clinics which could be because of their location of these STI clinics at medical

colleges, district hospital and Taluk hospitals. In contrast, very few referrals were made by ICTCs to STI services. Most of the ICTCs did not have access to psychiatric services to back up counsellors in case of clients suffering from any additional psychiatric co-morbidity which is common among such clients.^{15,16}

PPTCT services were provided at all the centres and were found to be adequate except for lack of Nevirapine stock in more than half of the ICTCs. The reasons are multiple, and can lead to delay in providing prophylaxis to mothers and babies. However, the redeeming factor was the fact that all sero-positive deliveries received Nevirapine prophylaxis which indeed is a positive aspect of ICTC services indicating a good co-ordinated effort by the programme. The PPTCT outreach counselling sessions were carried out by counsellors of CHCs and PHCs twice a week. The clients were counselled during these sessions but testing was carried out at ICTCs. The drawback was that the test reports were not issued on the same day; instead the reports were either issued during the consecutive ANC follow up. For those clients who miss the follow up junior health assistants issued the reports during their field visits. This could lead to ANC clients receiving reports without post-test counselling and also could breach confidentiality.

Most (75%) of the ICTC attendees were provider initiated and some (25%) were client initiated which is comparable to the national average of 65.9% and 34.1% respectively among the groups in the year 2010.¹ Additionally, dropout rate among client initiated group was 4.8% and provider initiated group was 3.3%, which was much lesser than the national average of 11.6% and 6.2% among the groups respectively.¹ This is another aspect which shows a well coordinated effort by the programme in the district. The Seropositivity among the providers initiated group was 3.7% and 1.3% among client initiated group, and national average of 4.1% and 2.8% among these groups respectively.¹ The uptake of ICTC services by ANC mothers was found to be 84.5% in our study as compared to national average of 88%.¹ In a similar evaluation of PPTCT services conducted in region 3 and region 6 of Thailand the uptake was found to be 99% and 93% respectively.¹² One of the main reasons for such low coverage could be due to lack of reporting from private sector.

The indicators on utilization across genders show that nearly 60% of men and only slightly above 40% of women attended pre test counselling at Udupi as compared to national average of 53% males and 47% females. A higher number of clients tested (33%) and found to be positive (50.2%) belong to 35-49 years of age which was slightly different from the national average of (40.3%) tested and (38.8%) found

positive among the younger age group of 25-35 years.¹⁷ From the indicators it was found that the in-referrals from DOTS was only 2.75% which is much lesser when compared to national average of 7%.¹⁷ The other indicators showed a good performance in district.

The pre test counselling content and skills assessment revealed gaps as some of the vital components of both the aspects were skipped. Factors such as high client load at some of the centres, pressure on the counsellors to achieve monthly targets and lack of interest in counselling among clients could have affected the quality of counselling. These factors need to be further evaluated by conducting focused group discussions among counsellors and client satisfaction studies. It was not possible to observe equal number of pre test and post test counselling sessions. This was because clients with HIV negative report did not receive post test counselling, instead the counsellors declare the test results and issued the reports. Hence, only sero positive post test counselling sessions could be assessed at high client load ICTCs located in the medical college hospital, district general hospital, and Taluk hospitals.

None of the clients or counsellors expressed any form of discomfort with sessions being observed. The counselling content and skills were observed by a single trained evaluator to maintain uniformity though observers' bias cannot be ruled out and authors accept this as a limitation of this study.

CONCLUSIONS

The ICTCs services such as utilization of services by the clients, infrastructure and staffing pattern were found to be adequate. Counselling component and referrals at the ICTC needs improvement. Since post test counselling is not given to most of the sero negative clients it becomes important to make post test counselling mandatory to all the clients attending ICTCs. Although our data is from a rural district of coastal south India, we should be cautious in generalization of the findings as health infrastructure, socio-political environment, and topography varies in the country. Following this evaluation authors make some recommendations which could help in improve service delivery at ICTCs. The Programme officer should encourage counsellors to increase referrals from ICTC to STI and Psychiatric services and improve in-referrals from TB services by bring about better coordination between them. All ICTCs should be supplied with Nevirapine stocks to prevent undue delay in providing prophylaxis in case of emergency deliveries. Counselling content and counsellors skills need to be monitored at regular intervals by programme officers or senior supervisors. The UNAIDS tool could be easily

adapted and used for this purpose. The post test counselling should be made mandatory to all the clients as it provides an opportunity to address the concerns of clients and also provide a second opportunity to effectively spread awareness and addressing issues such as stigma and discrimination. The Public Private Partnership model (PPP) of providing private hospitals with testing kits and setting up ICTCs at private hospitals could help in obtaining data from private sector.

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