

## **Services provided by Drop in Centre (DIC) to patient living with HIV/AIDS in a Tertiary Health Care Centre in Mumbai**

Saurabh RS.\*, Prateek SB.

Seth Goardhandas Sunderdas Medical College and King Edward Memorial Hospital, Mumbai, India

### **ABSTRACT**

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**Purpose:** To assess the role of drop in centre in providing assistance to Patients Living with HIV/AIDS (PLHA).

**Materials and methods:** A cross-sectional descriptive study was conducted at a Drop in Centre (DIC) located in tertiary health care centre in Mumbai. All the HIV positive persons who attended DIC during the period from January 2007 to December 2010 were included as study participants. After explaining aim of the study, written informed consent was obtained from all participants. Each of the study participants was interviewed face to face using a pre-tested semi-structured questionnaire. Drop in centre assessment was done based on the modes of assistance provided to the clients in accordance with the problems faced by them. Due care was taken to maintain privacy and confidentiality of study participants. Analysis was done with SPSS 16 version using frequency and percentages.

**Results:** 65.1% of the study participants were male and 78% from 31 – 45 years age group. In the duration of study, Non-Governmental Organizations (NGO's) support was offered to only 10.1% of PLHA's. Ignorance about HIV/AIDS was the most common psycho-social issue identified in 1068 (39.2%) subjects.

**Conclusion:** Efforts need to be taken for strengthening of DIC services and collateral referral system including NGO's. Also, the importance of establishing linkages with local PLHA networks should be stressed. Ignorance about HIV / AIDS was the major psycho-social issue identified and thus intensified IEC activities are required.

**Key words:** Patients, HIV, AIDS, Drop in centre, Integrated Counseling and Testing Centre, National AIDS Control Organization.

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**\*Corresponding author:**

Flat No 103, Hyatt Enclave, Humpyard Road, Dhantoli

Nagpur - 440012,

Maharashtra, India

Tel: +919833831683

E-mail: drshrishri2008@gmail.com (Saurabh Rambiharilal Shrivastava)

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## **INTRODUCTION**

Drop In Centre (DIC) is a concept for People Living with HIV/AIDS (PLHA) to provide counseling, psycho-social support & fulfillment of the basic needs (viz- nutrition, medical needs, shelter- legal help through Non-Governmental Organizations (NGO's) etc.). The objectives of the PLHA drop in centre is promoting positive living among PLHA's and improving the quality of life of the infected, building the capacity and skills of PLHA's to hope with the infection, creating an enabling environment for the PLHA's, establishing linkages with PLHA's with the existing health services, NGOs, Community Based Organizations and other welfare and development programs and protecting and promoting the rights of the infected [1]. The number of people living with HIV / AIDS who need care & support services are continuously increasing & thus there is a moral & humanitarian obligation to provide appropriate care & support to PLHA's. The care of HIV infected people is the most challenging aspect in HIV/AIDS prevention. There are many people living with HIV/AIDS hesitate to disclose their status due to fear of isolation and discrimination.

In 2009, there were an estimated 2.6 million [2.3 million–2.8 million] people who became newly infected with HIV [2]. In sub-Saharan Africa, where the majority of new HIV infections continue to occur, an estimated 1.8 million [1.6 million–2.0 million] people became infected in 2009 [2]. In Western, Central, and Eastern Europe, Central Asia, and North America, the rates of annual new HIV infections have been stable for at least the past five years. However, evidence is increasing of a resurgence of HIV in several high income countries among men who have sex with men. In Eastern Europe and Central Asia, high rates of HIV transmission continue to occur in networks of people who inject drugs and their sexual partners. In Asia region in the year 2009, almost 4.9 million [4.5–5.5 million] people were living with HIV while almost 360 000 (300 000–430 000) people were newly infected with HIV. Also AIDS-related deaths were around 300 000(260 000–340 000) in the Asia region [2]. In 2009, total number of people who are living with HIV was 33.3 million (including adults – 30.8 million & children < 15 years – 2.5 million) [3]. A population based survey was carried out during April-October, 2007 in Nagaland to estimate the prevalence of HIV and was found to be 0.74% [4].

The psychological and social sequel of HIV and AIDS infection is devastating to children, adolescents, women, and their families. Unlike other chronic/terminal illnesses HIV and AIDS infection is further complicated by the stigma related to the transmission of HIV infection (i.e.,

sexual activity and intravenous drug use). Due to disclosure fears and stigma associated with HIV and AIDS, many families isolate themselves from their extended family and communities to protect themselves and their children from maltreatment. Thus, they are cut off from valuable supports. These factors place these individuals and their family members at risk for mental health disorders (e.g., depression, post-traumatic stress disorder, and anxiety), developmental deficits, and behavioral problems (e.g., drug or alcohol use, school failure, inability to maintain a job, and criminal behavior) [5].

## **MATERIALS AND METHODS**

A Cross-sectional descriptive study was conducted at a Drop in Centre DIC located in tertiary health care centre in Mumbai. Universal sampling method was employed to select the study participants, i.e. all the HIV positive persons who attended DIC during the period from January 2007 to December 2010 were included as study participants.

**Data Collection:** After explaining them the aim of the study each of the study participants was interviewed face to face using a pre tested semi structured questionnaire to obtain their socio-demographic profile. The role of DIC was assessed by means of the care and support services offered to PLHA's according to their needs during the study period.

**Ethical Considerations:** Written informed consent was obtained from all the participants National AIDS Control Organization (NACO) Ethical Guidelines were followed up strictly for doing operational research [6]. Approval from Institutional Ethics Committee was taken prior to the start of the study. Due care was taken to maintain privacy and confidentiality of the participants.

**Statistical analysis:** Following parameters were used for analysis - Total number of PLHA's registered, socio-demographic parameters of clients, referral source of PLHA's to DIC, number of counseling sessions held, support and care services provided by DIC and detailed information about psycho-social issues detected amongst clients. Data analysis was done with SPSS software version 16 using frequency and percentages.

## **RESULTS**

Table 1 shows the number of new PLHA's registered and subsequently followed up at the DIC on an annual basis. The number of new cases registered has gradually increased from 2007 to 2010 depicting that the proportion of people infected with HIV / AIDS is on a rise. When

considering their follow up in the current year i.e in the same year as that of registration year it was observed that the follow up percentage has remained around 74.5% (average of current year follow up in 4 years) but the follow up percentage for the PLHA's who have registered at the DIC in previous years has remained persistently low (average – 30.1%).

Thus, there is a clear need that the PLHA's should be followed up by NGO's once they go back in community. Also, all the PLHA's should be counseled at the first meeting itself about all the services provided by DIC so that each of them can make use of those services whenever needed.

**Table1.** Number of HIV positive/AIDS cases registered and followed up annually in DIC.

Year	No. of new patient registered	No. of patients followed up		
2007	576	Current year	449	77.90%
2008	607	Previous year *	207	35.90%
		Current year #	435	71.70%
2009	764	Previous years	318	26.90%
		Current year	554	72.50%
2010	776	Previous years	534	27.40%
		Current year	589	75.90%
<b>Total</b>	<b>2723</b>	<b>3086</b>		

\*previous year/years – includes patients registered in previous year/years and have followed up in subsequent years. #current year – includes patients registered in the same year as registered.

**Table 2.** Distribution of PLHA's according to age and sex.

Year	Sex	0 -15 yrs		16 - 30 yrs		31 - 45 yrs		46 and above		Total
		N	%	N	%	N	%	N	%	
2007	Male	11	64.7	22	64.7	321	71.8	26	33.3	576
	Female	6	35.3	12	35.3	113	25.3	39	50	
	Trans-gender	0	0	0	0	13	2.9	13	16.7	
2008	Male	13	54.2	37	86	343	70.1	17	33.3	607
	Female	11	45.8	4	9.3	115	23.5	32	62.7	
	Trans-gender	0	0	2	4.7	31	6.3	2	3.9	
2009	Male	29	70.7	51	66.2	397	67.3	25	44.6	764
	Female	12	29.3	22	28.6	155	19.5	26	46.4	
	Trans-gender	0	0	4	5.2	38	6.3	5	8.9	
2010	Male	37	72.5	49	71	370	62	20	34	776
	Female	14	27.5	17	24.6	186	31.2	32	54.2	
	Trans-gender	0	0	3	4.4	41	6.9	7	12	

Table 2 shows the distribution of PLHA's registered at the DIC based on their age group and sex. Out of the total 2723 PLHA's registered at the DIC in four years about 2123(78%) were from the 31-45 years age group which is the economic productive group. It was observed that 1768(65.1%) PLHA's were male followed by 796(29.1%) female and 159(5.8%) transgender. The percentage of transgender cases registered at DIC has gradually increased from 4.5% in 2007 to 6.6% in 2010 showing that gradually trans-gender are also approaching the health system to avail the services of DIC.

Table 3 shows the source of patients who have registered at the DIC. ICTC has come into

existence on merging of VCTC and PPTCT in the year 2007. PPTCT mainly caters to the antenatal females who were found to be HIV positive at the time of routine HIV testing. ICTC (61.9%) served as the major source of referral of patients to DIC. Only 117(4.3%) patients have come to the DIC in four years on their own, stressing the fact that there is a great need to increase awareness about DIC in the general community as well as in the health care institutions that not only PLHA's but even general community can come to the DIC to resolve their myths/misconceptions; and increase knowledge about HIV/AIDS.

**Table 3.** Source of PLHA's coming to DIC.

SOURCE	2007	2008	2009	2010	TOTAL N(%)
<b>ICTC (VCTC+PPTCT)*</b>	358 (336+32)	441 (424+17)	496 (463+33)	391 (355+36)	1686 (61.9%)
Out Patient Department / In patient Department	112	134	165	207	618(22.7%)
Non Governmental Organizations (NGO)	11	6	59	95	171(6.3%)
Anti Retroviral Therapy (ART) Centre	52	12	40	27	131(4.8%)
Self	43	14	4	56	117(4.3%)
<b>TOTAL</b>	<b>576</b>	<b>607</b>	<b>764</b>	<b>776</b>	<b>2723(100%)</b>

\*ICTC – Integrated Counseling & Testing Centre; VCTC – Voluntary Counseling & Testing Centre and PPTCT – Prevention of Parent to Child Transmission

**Table 4.** Support and Care services provided by DIC.

Year	Referral to hospital OPDs	Referral to ART Centre	ICTC	NGO	Help through MDACS and MSW#	Total*
2007	432 (75%)	305 (53%)	32 (5.5%)	15 (2.6%)	98 (17%)	576
2008	559 (92.1%)	218 (35.9%)	36 (5.9%)	26 (4.3%)	232 (38.2%)	607
2009	702 (91.9%)	119 (15.6%)	43 (5.6%)	95 (12.4%)	40 (5.2%)	764
2010	746 (96.1%)	197 (25.4%)	78 (10.1%)	164 (21.1%)	89 (11.5%)	776

\*the observations are not mutually exclusive; #MDACS – Mumbai District AIDS Control Society; MSW – Medical Social Worker

Table 4 shows the variety of services that have been offered by DIC to the PLHA's either by themselves or with the help of the various agencies

like MDACS / NGO's / MSW etc. During the study period NGO supportive services has gradually increased from 2.6% in 2007 to 21.1% in 2010.

There were two types of meetings organized for PLHA's namely support group meetings and monthly get together meetings. In **Support group meetings** representatives from various faculties like NGO / ART Centre / Legal representative / Microbiologist / Counselors / Dietitian / Associate Professor from Department of Community Medicine / Physician / Head of Department of Medicine are called to provide information about all the services that can be made available to the PLHA's once they come to the tertiary health care centre. In **monthly get together meetings** all the registered PLHA's are contacted by the counselors telephonically in advance to come to the meetings in order to share their experience. Such meetings are organized by the DIC staff to empower the PLHA's to live with HIV and take motivation from other PLHA's. At such meetings they are also

shown CDs providing information about the new schemes launched by the Government to support PLHA's.

It was observed that both support group meetings (10 in 2007 to 22 in 2010) and monthly get together meetings (7 in 2007 to 12 in 2010) have increased in four years but decrease in the number of beneficiaries in monthly meetings is a matter of concern. Out of the total 2367 married PLHA's registered at DIC only 1611(68.1%) spouses were counseled about the consequences / myths / precautions about HIV / AIDS. Though the DIC has counseled about 68.1% of spouse but the need of the hour is to focus on remaining of the 31.9% spouse so that any marital / familial conflicts or desertion by spouse can be avoided.

**Table 5.** Psycho – Social issues.

Psycho – Social issues	2007	2008	2009	2010	Action taken by DIC
Deserted by spouse	0	0	76	121	Family Counseling, Spousal counseling, Legal assistance
Marital conflicts	31	74	57	81	Family Counseling, Spousal counseling, Legal assistance
Loss of employment	6	0	0	21	Refer to NGO's for vocational opportunities, Legal aid
Depression, fear, anxiety & others	33	103	125	297	Given information about HIV / AIDS, Medical assistance, Awareness about the services offered by DIC
Ignorance about HIV/AIDS	219	214	233	402	Given information about HIV / AIDS

Table 5 shows the various psycho-social issues faced by the registered PLHA's and reported to DIC and mode of assistance offered by DIC. Marital conflicts have gradually increased in four years and were reported by 243 PLHA's. Ignorance about HIV / AIDS was the most common psycho-social issue identified in 1068 PLHA's stressing on the reality that in spite of Governmental various IEC programs the information is not reaching where it should reach. These PLHA's were offered information about HIV / AIDS mainly about its spread, myths associated with HIV, precautions that need to be taken to prevent its spread and the most important thing that this is not the end of life rather HIV positive people have to live a responsible life in the society and set an example for others.

## DISCUSSION

Drop in centre was an initiative by the Government to help PLHA's in such a way that they can come to this centre any time for whatsoever there need be. The DIC has been strengthened by establishing linkages with all those

organizations which can help PLHA's in leading a normal life. But for an effective working there is a need of help from the various support groups working in the community. This has been proved by Men's Action Group in Harare, Zimbabwe [7]. As per the UNAIDS global report 2010, it was reported that for proper functioning of the DIC, a strong political and administrative commitment is required from the Government mainly the financial support [8].

It was observed that although the new registration of PLHA's at DIC is rising but the follow up percentage of PLHA's who have been registered in the previous years is persistently low (30.1%). In the current study depicting observation for four years highest proportion of men (67.8%) who were infected with HIV was in 31 – 45 year age group as compared to that in Uganda where the highest prevalence for men (9.9%) being among 35 – 39 year age group [9].

The psychological or internal challenges a person with HIV/AIDS faces vary from individual to individual. Each HIV/AIDS situation is as unique as the people involved. They may become withdrawn, aggressive, and rude to colleagues and

friends. This may be because the infected person may feel (or imagine) being victimized. In the present study desertion by spouse (217), marital conflicts (243) & ignorance about HIV/AIDS (1068) were the major psycho – social issues identified in the PLHA's. Though we have observed that DIC has counseled about 68.1% of spouse registered with them but the need of the hour is to focus on remaining of the 31.9% spouse so that any marital / familial conflicts or desertion by spouse can be avoided. In a study explaining the psychological impacts of HIV about 12 million children in sub-Saharan Africa have lost one or both parents to AIDS [10]. National AIDS Control Project (NACP) - III plans to strengthen family and community care through psycho-social support to the individuals, more particularly to the marginalised women and children affected by the epidemic, improve compliance of the prescribed ART regimen, and address stigma and discrimination associated with the epidemic [11]. To tackle with the various psycho-social issues identified support of NGOs was taken by DIC in providing the PLHA's with legal aid [12].

In the present study, 17 PLHA's reported loss of employment. AIDS has the potential to create severe economic impacts in many African countries. It is different from most other diseases because it strikes people in the most productive age groups and is essentially 100 percent fatal. The two major economic effects are a reduction in the labor supply and increased costs [13, 14].

In the current study, 558 study participants reported depression, fear and anxiety among themselves because of HIV/AIDS. In a study carried out in one of the province of South Africa it was observed that most members of the support group experienced a high degree of stigma at home and needed a so-called 'safe space' to escape and discuss issues with people experiencing similar problems [15].

The study had its limitations in the form that no efforts were taken by the researchers in knowing how subjects have contracted HIV/AIDS. The quality and nature of assistance which was offered to PLHA's by the NGOs/ MDACS/ MSW were not assessed. Plus HIV being a sensitive issue the subjects might have not given the complete information.

## **CONCLUSIONS**

There is a need to strengthen the NGO network by bringing all the NGO's together and covering the entire population geographically. Efforts need to be taken for strengthening of DIC services, and a collateral referral system mechanism needs to be established. Ignorance about HIV / AIDS is still the major psycho-social issue prevailing in the community, thus intensified IEC

activities needs to be carried out. Spousal and family counseling services also need to be strengthened to reduce the psycho-social issues like marital conflicts/ desertion by spouse. DIC should as well try to involve MDACS to a greater extent so that more and more PLHA's can be benefited by the Governmental policies. Efforts should be taken by the field staff, mainly of NGO's and DIC to reach all the PLHA's and all of them should be connected to the patient provider meetings / support group meetings so that they can be empowered and thus come in the mainstream.

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### **Conflicts of interest**

We declare that we have no conflicts of interest.

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