

# An Intervention Study To Enhance Aids Awareness Among Underprivileged Population In Chandigarh

V BHATIA, H SWAMI, S PURI, C MANGAT, A GUPTA

## Citation

V BHATIA, H SWAMI, S PURI, C MANGAT, A GUPTA. *An Intervention Study To Enhance Aids Awareness Among Underprivileged Population In Chandigarh*. The Internet Journal of Epidemiology. 2009 Volume 8 Number 1.

## Abstract

It is estimated that world wide, 33.2 million people were suffering, 2.1 million died and 2.5 million got newly infected from HIV/AIDS in the year 2007. Nearly 2.5 million people are suffering in India at present. Family health awareness campaign (FHAC) has been implemented under National AIDS Control Programme (NACP) to scale up HIV/AIDS awareness in the vulnerable groups. Community based study was conducted in April 2001 to find out the impact of FHAC and IEC activities in 12 villages and slums in Chandigarh. Nearly 1-1.5 lac people are living in these areas. Information was collected from 323 subjects in pre-intervention phase and from 320 subjects in post-intervention phase in the age group of 15-49 years. The awareness about AIDS increased from 58.2% to 70%. The major sources of information were mass media and friends. Knowledge regarding mode of spread also increased and the majority were aware about multiple sex partners and use of unhygienic/ used syringes and needles, after the campaign. Knowledge regarding prevention of AIDS by using condom increased from 42% to 61.2%, having single partner from 59% to 72.3%, using safe blood from 14.9% to 29% and sterile needles/syringes from 18.1% to 33.9%. Over 90% of respondents consider AIDS as a dangerous disease. Community based intervention such as FHAC and IEC activities were successful in enhancing the awareness among underprivileged groups. Still a large section of the population remains unaware, thus regular efforts must be made to achieve universal awareness.

## INTRODUCTION

AIDS is considered a dreaded disease as no effective vaccine or drug therapy for complete cure is available so far. Recent estimates keep 33.2 million people suffering from HIV/AIDS, with 2.5 million people newly infected with HIV and 2.1 million deaths in the year of 2007<sup>1</sup> globally. Since the detection of first case in 1986 in Tamil Nadu, 68809 confirmed cases of AIDS were reported till March 31, 2004<sup>2</sup>.

Mass Media Campaigns and interpersonal communication through non-government organizations (NGO's) were undertaken to raise level of awareness in general population but it raised awareness only in the urban areas. Therefore, Govt. of India launched intensive programme to create awareness about AIDS and provide services for sexually transmitted diseases (STDs) and reproductive tract infections (RTIs) through family awareness campaigns<sup>3</sup>. The present study was conducted in the community to find out the increase in the level of awareness about AIDS occurring as result of intervention of organising camps, awareness campaigns and IEC activities in rural and slum population of Chandigarh.

## MATERIAL AND METHODS

Union territory of Chandigarh is a modern city having a population of 0.9 million in an area of 114 sq. km. The city has not only attracted a large number of youth for educational purposes but also a large population of migrants from states of Uttar Pradesh and Bihar have settled and thus 27 slums have developed in UT. Rural area comprises of 26 villages which are in close proximity of urban sectors which are modern and planned. Thus, UT Chandigarh has nearly 50-55% population in urban sectors, 10% in rural and 35-40% in slums and resettled colonies.

Govt. of India initiated family health awareness campaign in April-May, 1999 under the National AIDS Control Programme with one of the objectives of scaling up awareness on HIV/AIDS in rural areas and in other vulnerable groups of population and identifying the high risk groups for targeted intervention programme. UT Chandigarh has been implementing this campaign right from the beginning.

The present study was conducted in the month of April 2001 when a similar campaign was implemented by State AIDS

Control Society in collaboration with various NGO's. Pre-camp activities were carried out in 12 villages and urban slums where ICDS workers (Anganwadi Workers = AWW's) made house to house visits over 4 days and distributed information cards besides educating and informing community about AIDS. Subsequently camps were organised in the respective villages and people in the age-group of 15-49 years participated in those camps. Symptoms related to STD's were detected and treated, IEC activities in form of talks, dance & drama, folk dances, poster / handbills were carried out. One such camp was organised every day between 16-30<sup>th</sup> April in the selected villages / slums.

The team from Department of Community Medicine collected information on HIV/AIDS from the persons in the age group of 15-49 years in the village and slums. The information was collected on a standard format from 4 village and 6 slums wherein 30-40 persons were contacted randomly from each, representing all the areas. The base-line data was collected prior to implementation of any of activity related to FHAC. Once the camps were over the same team visited the areas after one week and collected information on the same format from the randomly selected population. Thus, 323 persons in pre and 320 in post-intervention phase were enrolled in the study.

## RESULTS

The present study was conducted in 10 villages and slums having a population of about 1-1.5 lacs which generally comprised of low socio-economic and underprivileged strata. The majority of the population was engaged in daily wagers jobs, small shopkeepers or involved in unskilled labour.

**Figure 1**

TABLE – 1 SEX AND AREA WISE AWARENESS OF AIDS

A) Gender wise	Pre-Intervention Awareness			Post- Intervention Awareness		
	Male	Female	Total	Male	Female	Total
Studied	149	174	323	115	205	320
Aware	107 (71.8)	81 (46.5)	188 (58.2)	89 (77.4)	135 (65.8)	224 (70.0)
B) Area Wise	Rural	Slums	Total	Rural	Slums	Total
Studied	129	194	323	137	183	320
Aware	89 (70.0)	99 (51.0)	188 (58.2)	106 (77.4)	118 (64.5)	224 (70.0)

Table-1 reveals that overall AIDS awareness increased from 58.2% in pre-intervention phase to 70% in post-intervention

phase. The increase was lower among males in comparison to females, where it increased from 46.5% to 65.8%. However, more males were aware about AIDS in pre and post-intervention phase. It can also be seen that rural population was more aware in both the phases. Their awareness level increased from 70% to 77.4% whereas in slums it increased from 51% to 64.5%. It was interesting to note that major source of information about AIDS was mass media followed by friends and camps both pre and post-intervention phase (Table-2).

**Figure 2**

TABLE – 2 SOURCE OF INFORMATION ABOUT AIDS

Source of Information	Pre- Intervention Awareness (n=188)	Post- Intervention Awareness (n=224)
Friends	64 (25.3)	61 (27.2)
Relatives	04 (1.6)	16 (7.1)
Camps	26 (10.3)	45 (20.0)
Health workers	25 (9.9)	32 (14.2)
Mass media	124 (49.2)	187 (83.4)

It can be seen from table-3 that the increase in awareness level regarding modes of transmission was good about blood transfusion (from 22.8% to 46%) and unhygienic needles/syringes (from 35.6% to 51.8%) whereas the awareness regarding mother to child transmission remained low (from 10% to 17%). Awareness regarding multiple sex partners remained high at around 70% in both phases. A major gain was noticed among males regarding blood transfusion and among females regarding syringes and needles.

**Figure 3**

TABLE – 3 MODE OF SPREAD OF AIDS

	Pre- Intervention Awareness			Post- Intervention Awareness		
	Male (n=107)	Female (n=81)	Total (n=188)	Male (n=89)	Female (n=135)	Total (n=224)
Bad blood transfusion	23 (21.4)	20 (24.6)	43 (22.8)	61 (68.5)	42 (31.1)	103 (46.0)
Unhygienic Syringes & Needles	43 (40.0)	24 (29.6)	67 (35.6)	59 (66.3)	57 (42.2)	116 (51.8)
Mother to child	10 (9.3)	11 (13.5)	19 (10.0)	20 (22.5)	18 (13.3)	38 (17.0)
Multiple Sex Partner	78 (72.8)	54 (66.6)	132 (70.2)	56 (62.9)	110 (81.5)	166 (74.1)

Table-4 reveals that after the intervention overall awareness

about prevention of AIDS improved. More persons knew about condoms (from 42% to 61.2%), having sex with single partner (from 59% to 72.3%), using safe blood (from 14.9% to 29.0%) and sterile needles and syringes (from 18.1% to 33.9%). The increase was noticed among both sexes.

**Figure 4**

**TABLE – 4 AWARENESS REGARDING PREVENTION OF AIDS**

	Pre- Intervention Awareness			Post- Intervention Awareness		
	Male (n=107)	Female (n=81)	Total (n=188)	Male (n=89)	Female (n=135)	Total (n=224)
Hygiene	4 (3.7)	2 (2.5)	6 (3.2)	36 (40.4)	23 (17.0)	59 (26.3)
Using Condom	51 (47.7)	28 (34.6)	79 (42.0)	71 (79.8)	66 (48.9)	137 (61.2)
Single Partner	69 (64.5)	42 (51.8)	111 (59.0)	55 (61.8)	107 (79.2)	162 (72.3)
Safe Blood	17 (15.9)	11 (13.6)	28 (14.9)	30 (33.7)	35 (25.9)	65 (29.0)
Sterile Needles	21 (19.6)	13 (16.0)	34 (18.1)	40 (44.9)	36 (26.7)	76 (33.9)
Can not be Prevented	1 (0.9)	-	1 (0.5)	-	2 (1.5)	2 (0.9)

It is further seen in table-5 that over 90% of the participants observed AIDS as a dangerous disease in pre and post-intervention phase. Among the subjects considering AIDS as dangerous, over half (57.3%) considered so because no treatment is available, one fifth (20.1%) considered so due to non-availability of vaccine or because patients die within few years (26.9%), or because AIDS spreads fast (6.2%) and needs lot of money for treatment (4.4%), in the post-camp evaluation study.

**Figure 5**

**TABLE – 5 AIDS CONSIDERED DANGEROUS: PRE & POST CAMP AWARENESS**

	Pre- Intervention Awareness			Post- Intervention Awareness		
	Male (n=107)	Female (n=81)	Total (n=188)	Male (n=89)	Female (n=135)	Total (n=224)
Considered dangerous	104 (97.1)	77 (98.0)	181 (96.2)	82 (92.1)	122 (90.4)	204 (91.1)
No treatment available	58 (55.7)	51 (66.2)	109 (60.2)	38 (46.3)	79 (64.7)	117 (57.3)
No vaccine available	7 (6.7)	3 (3.8)	10 (5.5)	30 (36.6)	11 (9.0)	41 (20.1)
Patient dies	44 (42.3)	9 (11.6)	53 (28.7)	23 (28.0)	32 (26.2)	55 (26.9)
AIDS Spread fast	16 (15.3)	7 (9.0)	23 (12.7)	7 (8.5)	7 (5.7)	14 (6.2)
Lost of money required for treatment	2 (1.9)	-	2 (1.1)	6 (7.3)	3 (2.4)	9 (4.4)

## DISCUSSION

The present study representing a population of 1-1.5 lac in rural and slum population in UT Chandigarh was conducted as a part of family health awareness campaign and results of the study reflect the effect of the massive intervention carried out by a large number of health workers, ICDS workers and supported by doctors, technician, health managers etc. It was heartening to note that the baseline level of AIDS awareness was existing in 58% of the community which was over two-third among males and little below half among females. But extensive IEC activities and camp approach resulted in an increase to a level of 70%. The gain was lesser among males in comparison to females. Target specific intervention programmes are important strategies of National AIDS Control Programme in India. HIV/AIDS is reported to be prevalent higher among STD patients. Rural population was found to be more aware of AIDS than the slum dwellers in the present study. This could be because of the floating nature of migrant population, existence of high illiteracy and non-existent or poor health services in slum areas. But FHAC resulted in considerable gain in slum population i.e. increase from 51% to 64% in comparison to rural community (from 70% to 77.4%). A similar study of rapid sample survey, 68% of the persons were aware of HIV/AIDS in May 1999, as against 49% in 1996<sup>4</sup>. Thus, FHAC is an effective means to enhance the awareness among poor section of the population as has been envisaged in its objectives by Govt. of India. The community based survey in Kargil in the reproductive age group population reported a low of only one-fifth being aware of AIDS which is for some reason due to orthodox muslim majority due to low female literacy, low sex ratio

and discussing issues related to sex being taboo<sup>5</sup>.

Multi-pronged strategies are applied to reach masses for creating awareness about AIDS. Mass media (TV, Radio etc.) is a strong means to do so. Nearly half of the people at base line level and over four-fifth after intervention considered mass media as sources of information regarding AIDS in the present study. Camps and health workers are important contributors, but the kind of immense effort made by them could not achieve the desired level. Presence of TV or radio in almost all households is a good, cheap and effective channel. Similar findings were reported by Lal's in the FHAC in the year 1999<sup>4</sup>. It is further important that knowing about HIV/AIDS does not mean that the community is aware about various modes of transmission of HIV/AIDS and means to prevent it. It could be seen in the present study that over 70% of the population was aware of unsafe sex / multiple sex partners as mode of transmission but awareness remained low for blood transfusion and using unsterile needles and syringes; where even intervention left nearly half unaware about it. Vertical transmission as a mode was known to only a few study subjects. Using condom and having sexual intercourse with single partner to prevent AIDS was known to 61.2% and 72.3% of the subjects, respectively after the intervention phase. This is apparent from the fact that sexual intercourse is considered to be important mode of transmission. Current figures from NACO reported sexual route to be responsible for 84.24% of all AIDS cases reported in India<sup>2</sup>. Though FHAC led to increase in awareness level regarding various routes and preventive measures, yet more than two-third were unaware about the role of needles / syringes and safe blood. Knowledge about condom increased from 42% at pre to 61.2% at post intervention phase and is an important gain. If condoms are used by the community, this can lead to remarkable decline in HIV/AIDS/STD prevalence in the country. Studies report a 69-87% reduction in the risk of contracting disease including gonorrhea, chlamydia, trichomoniasis and HIV infection when using condom<sup>6</sup>.

Various studies and IEC intervention have been carried out in the country and a wide range of AIDS awareness level and successful efforts have been reported in different age-groups and settings e.g. 13.5% school students and 16.2% teachers had knowledge about AIDS in Calcutta<sup>7</sup> 83.3% to 100% students in different streams were aware in Maharashtra<sup>8</sup>, 83% of child development project officers (ICDS) in Delhi knew about AIDS<sup>9</sup>. Significant improvement was seen in the areas of sex and AIDS

knowledge during post training phase in students of Pune city<sup>10</sup>.

The recent National AIDS Control Policy of Govt. of India clearly aims at preventing future spread of the disease by making people aware of its implications and by providing them with the necessary tools for protecting themselves. Policy stresses on creating a socio-economic environment, that helps all sections of populations to protect themselves from the infection and families and communities can provide care and support to people living with HIV/AIDS<sup>11</sup>. Though family health awareness campaign is a remarkable effort to reach community but the momentum has to be maintained. A large section is poor society, is still lacking in basic knowledge about AIDS, its spread and prevention. One time activity such as FHAC enhanced the knowledge in the present study but activities such as awareness campaign, IEC activities, camp approach, mass media, and involvement of community leaders must be consistently implemented. Regular evaluation must be carried out to assess the achievements made in such efforts.

## CONCLUSION

The present community based intervention study on AIDS awareness observed a significant gain in the underprivileged population. More sustained efforts are needed to make community fully aware on prevention of HIV/AIDS.

## References

1. UNAIDS, WHO. AIDS epidemic update: December 2007. Geneva Joint United Nations Programme on HIV/AIDS.
2. <http://www.naco.nic.in/indianscene/overv.htm>; page Indian scenario updated as on 31st March, 2004
3. National AIDS control programme: family health awareness campaign. Operational Guide. NACO: MOH & FW, Govt. of India. Dec. 1999.
4. Lal S. Building awareness on AIDS/HIV through intensive campaign on pilot basis. *Ind. J Com. Med.* 1999; 24:47-49.
5. Ahmed M, Gaash B. Awareness of HIV/AIDS in a remotely located conservative district of J & K (Kargil). *Results of a community based study.* *Ind. J Com. Med.* 2002; 27:12-18.
6. Giron CAH, Valdez AC, Trenado MQ, Salas FU, Peruga A, Avila MH. Factors associated with condom use in the male population of Mexico City. *Int. J STD & AIDS* 1999; 10:112-117.
7. Chatterjee C, Baus B, Ram R, Dhas G, Sandhu Khan S, Dan A. A study on awareness of AIDS among school students and teachers of higher secondary schools in North Calcutta. *Ind. J Pub Health.* 2001; 45:27-30.
8. Ganguli SK, Rekha PP, Gupta N, Charan UA. AIDS awareness among undergraduate students. *Maharashtra. Ind J Pub Health.* 2002; 36:8-12.
9. Paul D, Gopalkrishnan. Knowledge regarding modes of transmission and prevention of sexually transmitted diseases including HIV/AIDS among child development project

officers. Ind. J Com. Med. 2001; 26:141-144.

10. Pratinidhi AK, Gokhale RM, Karad SR. Evaluation of sex education and AIDS prevention project in secondary

schools of Pune City. Ind J Com. Med. 2001; 26:155-161.

11. National AIDS Prevention and Control Policy. MOHFW, NACO. Govt. of India.

**Author Information**

**VIKAS BHATIA, MBBS, MD**

Reader, Department of Community Medicine, Government Medical College & Hospital

**H M SWAMI, MBBS, MD**

Professor & Head, Department of Community Medicine, Government Medical College & Hospital

**SONIA PURI, MBBS, MD**

Senior Lecturer, Department of Community Medicine, Government Medical College & Hospital

**CHETNA MANGAT, MBBS**

Post Graduate student, Department of Community, Government Medical College & Hospital

**AMAN GUPTA**

Intern, Government Medical College & Hospital