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Awareness about HIV/AIDS amongst commerce students

Medical Science

KEYWORDS : HIV/AIDS awareness, stigma/discrimination, sensitization, behaviour change communication, training

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ABSTRACT

Introduction

HIV/AIDS is rapidly spreading,major public health problem in India. National response emphasises the preventive strategies by high-risk-behaiour-reduction at early age and dissemination of right messages during formative years. Present study was carried out to assess baseline levels of HIV/AIDS awareness and to assess the impact of on-hand, interventional training in improving them among commerce students.

Methodology

All 50, first year commerce students from a college were selected. Awareness levels on HIV/AIDS were checked by pre and post-training questionnaire-based interview method. Gain in knowledge and change in behaviour pattern was analysed.

Results

More than 50% gain was seen for questions related to highest concentration of HIV in body fluids, drugs available, incubation period of HIV, indicator cells for prognosis and commonest infections in HIV/AIDS. Definite gap areas were identified in knowledge about modes of HIV transmission and opportunistic infections. More than 75%, 50% and 25% gain respectively was seen in whereabouts of ART facilities, knowledge of HIV/AIDS helplineand whereabouts of testing facilities. 42% gain was reported post-training for question on pre-transfusion blood tests. Doctors were preferred as future source of information. Unsympathetic attitude towards seropositives was seen in 4% subjects pre-training.

Conclusion

Dissemination of right messages during formative years is imperative. BCC with correct technical, programmatic and health-seeking-behaviour-related knowledge is need of hour. Short, on-hand, college-based trainings on HIV/AIDS should be incorporated in syllabus.

INTRODUCTION

AIDS is a serious disorder of the immune system in which the body's normal defences against infection break down, leaving it vulnerable to a host of life threatening infection. HIV emerged later in India than it did in many other countries. At the beginning of 1986, despite over 20,000 reported cases of AIDS worldwide, India had no reported cases of AIDS but thereafter the pandemic turned into a widespread scare across the country. Since the detection of the HIV infection in commercial sex workers in Tamil Nadu in 1986, there has been a steady increase in the number of AIDS cases across the country. According to UNAIDS report in July 2006 India has 5.7 million HIV cases which is the largest in the world. [1]

Adults were the most widely affected population. Government's approach to curb the disease was in the form of National AIDS Control Program (NACP) in various phases including areas like targeted interventions, voluntary counselling and testing and provision of care, support and ART to the affected.

Initially, the approach was to target the core/HRB populations but gradually with shifting dynamics of epidemic into general population through the bride population, approach also included focus on next generation of the adults i.e. adolescents, the school/college-going population since they constitute a very important segment of the population that need to be sensitized towards issues of HIV/AIDS considering them future citizens and productive population of the country. Behaviour change communication starting at an early age can be instrumental in bringing about long-term change in community perceptions towards HIV/AIDS be it stigma/discrimination or service utilization by government. Red Ribbon Express, since its launch in 2007, is one such initiative.

Medical and para-medical students are naturally believed to have higher knowledge towards these issues compared to their non-medical counterparts. Present study was carried out to assess the existing levels of knowledge in one such strata of students in order to assess the knowledge and sensitization levels of college-going commerce students about basics of HIV/AIDS, prevention, support, treatment, their perceptions of programmatic services and stigma/discrimination pertaining to HIV/AIDS as well as to assess the efficiency of a small, on-site, hands-on training for the same.

MATERIALS AND METHODS

Study design, area and duration

The study was carried out in first-year, commerce-stream students of LJ commerce collage, Ahmedabad after obtaining due permissions from authorities. Non-commerce streams were excluded for this phase of the study. All commerce students were offered participation in study regardless of their academic medium of learning i.e. English or Gujarati. Opt-out policy was adopted and students were asked for their willingness to participate in the study. After informed consent which included confidentiality maintenance throughout the process, out of total 150, 50 students opted to be a part of this cross-sectional study. Study including report writing was completed over a period of 3 months from June to August 2012.

Study tool
Students answered through pre-formed, pre-tested, written questionnaire after which an interactive, pre-structured lecture of 10 minutes was given to them on the same issues and the same questionnaire was administered again. Newer responses were recorded again. Questions were clustered into four categories i.e. questions related to Stigma/Discrimination, Health Seeking Behaviour, Service Delivery and Technical Questions – to assess the gain in knowledge or change in attitude after small, hands-on training.

Analysis
Data were entered and analyzed in MS Excel 2007 and proportions were calculated.

RESULTS
Gain in correct knowledge was 66% for questions like body fluid with highest concentration of HIV, If drugs were available for HIV/AIDS or not and incubation period of HIV, followed by indicator cells for HIV prognosis (64%), most common infections in HIV / AIDS (52%) and If there was any difference between HIV and AIDS (46%). [Table I]

Pre-training analysis of the questionnaire showed that 76% students believed that HIV seropositive mother must not breastfeed the baby. 34% believed that hypertension was the commonest opportunistic infection followed by diabetes (18%). 24% believed that there was a functional vaccine available for HIV. 48% believed the incubation period of HIV was less than a year. [Chart I]

Gain percentages were 62% and 54% respectively in questions like if they had heard about HIV/AIDS helpline number and knowledge of such correct helpline number. Post-training, 28% gain in whereabouts of testing facilities and average 76% gain in whereabouts of ART facilities was reported. [Table II]

A gain of 42% was reported post-training for question on pre-transfusion tests to be performed on blood. Gain of 16% knowledge about counselor services and of 40% for doctors as future source of information was reported post-training. [Table III]

4% students before the training were of opinion to completely stop talking to an HIV sero-positive friend or to disclose his identity to other friends or were indecisive on how to deal with them. The attitude decreased to 0% post-training. Willingness to provide support to such friend was raised from 62% to 96%. [Chart II]

DISCUSSION
The administered questions were divided into various categories like technical questions, questions pertaining to national vertical program and its delivery, health-seeking behavioral patterns of the respondents as well as stigma and discrimination associated with the disease and the impact of training was assessed in terms of gain in correct knowledge among them.

Also looked into detail were the distracters and proportion of responses to them under various technical questions to assess the widely prevailing false beliefs and misinformation so that future training and sensitization programs can be focused upon them specifically.

Regardless of the study stream, whether its science or commerce or arts, certain degree of technical knowledge is required among all the future citizens i.e. the students of the country related to a wide-spread disease like AIDS and its causative organism HIV. Only the correct knowledge can go a long way in preventing the spread of this menace in subsequent generations. Ganguli SK et al in their study in Nashik and Talegaon in Maharashtra (India) noted that overall knowledge of science students was better compared to commerce and arts students.[2]

Commerce students in present study were specifically chosen to identify those gap areas among them considering their non-science post-school learning. It was observed that the gain from baseline faulty knowledge to correct knowledge after the intervention of brief, in-class training was highest for issues like virus' concentration in various body fluids (which form the basis of safe sex practices, 66% gain), possible cure/management of AIDS patients (that can enable an infected person to live a prolonged, healthy, good quality life, 66% gain), indicator cells for advancement of the disease like CD4 and CD8 (which form the basis of periodic check-up of AIDS patients and its benefits, 64% gain) and the incubation period of HIV (which ranges in years and often proves a lethal role in further transmission of the disease from a seemingly symptom-free patient, 66% gain).Also noteworthy were the gain percentages for questions like if there was any difference between HIV and AIDS (46% gain) and most common opportunistic infection(s) during AIDS (52% gain). Most students before training falsely believed HIV and AIDS were synonymous terms and did not know specifically about the stages of the disease and what happened during them. Also, they were not clear about AIDS being cluster of various diseases resultant from several opportunistic infections and Tuberculosis being commonest among all. [Table I]

Routes of transmission (6% gain) and how to prevent HIV transmission (14% gain) were relatively known areas to the students. Ganguli SK et al also reported the similar deficit of knowledge regarding modes of transmission of HIV in undergraduate college students.[2]Findings of Swati A et al in Hyderabad college students also corroborates when it came to knowledge about predominant modes of transmission of HIV which indicated lack of comprehensive knowledge.[3]Aggressive media campaigns under NACP III and NACP IV are thus proving to be of great advantage. 18% gain was reported in questions like if HIV was curable or not. This shows the further need to stress more upon the medication part, ART and its drugs, their life-long use and the prolonged quality of life it can provide by consistent use. [Table I]

False distracters often tell the story that is otherwise missed in routine training-based interventions. In present study too, various false distracters under technical questions were widely chosen by the students. As many as 76% students believed that HIV seropositive mother must not breastfeed the baby while PPTCT component of the NACP proposes AFASS criteria and local suitability. More than 1/3rd of respondents (34%) believed that hypertension was the commonest opportunistic infection followed by diabetes as the commonest opportunistic infection (18%) while the fact is both hypertension and diabetes are non-communicable disease and students should have known about infectious diseases a little more. Almost 1/4th of the students (24%) believed that there was a functional vaccine for HIV while almost half of the students (48%) believed the incubation period of HIV was less than a year. [Chart I] Careful analysis of such distracters should give useful insight in planning future training materials.

Students are often the most misguided lot when it comes to procuring right messages towards HIV/AIDS and high-risk behavior. Swati A et al in their study involving college students of Hyderabad observed that the students were comfortable learning more about HIV/AIDS from health professionals, their peers and mass media, due to accessibility, comfortability and anonymity.[3]There are telephone help lines existing under NACP in each state and even dedicated lines in metro

cities like Ahmedabad. Gain percentages were more than 50% about correct information regarding these help lines post-training. [Table II] Scope for health education amongst college students was well-felt and it was observed that better methods of promoting knowledge about HIV needed to be used extensively in addition to the existing ones in order to ensure correct, comprehensive and long-lasting information retention by Ganguli SK et al and Swati A et al in their studies in Maharashtra and Hyderabad. [2, 3]

Similarly, simple information like where should one go to avail a stigma-free, confidential HIV test is of paramount importance for younger generation. Under NACP, the testing is done with strict parameters, by three tests and is clubbed with counseling too. Also, there are several ART centers across the state of Gujarat now where free, lifelong ART is available for HIV positive patients after due registration. There are two full-fledged ART centers in only Ahmedabad. Such humongous facilities would go unutilized if there is no widespread knowledge among the community about them. 28% gain in whereabouts of testing facilities and average 76% knowledge gain in whereabouts of ART facilities proves the point. [Table II] Ganguli SK et al conversely reported that the knowledge regarding tests and testing facilities was observed in majority of their study subjects. [2]

Voluntary blood donation is an activity with strong social message and an act of humanity. Also, it is the backbone of national population-based strategies for prevention of transmission of HIV through blood and blood products contrary to sophisticated and expensive laboratory tests. Commercial blood donation is prohibited and the youth must know the correct practices about blood donation. A gain of 42% in which kind of tests must be run on the blood sample before using it for transfusion suggests the need to incorporate the basic knowledge of pre-transfusion tests and requirements in further IEC/BCC materials. [Table III]

HIV/AIDS is an ailment with profound psycho-social impact. Counseling or right methods of message dissemination -are the mainstay in combating that. Hitendra T et al in their study on college students in Surat reported that doctors were the first choice to impart the sex education, followed by school teachers.[4]There are dedicated counselors under NACP at every healthcare facility and one must not shy away from taking their help. A gain of 16% knowledge about the same is still less and further actions should be channeled towards bringing these counselors to the fore. [Table III]

Stigma associated with this ailment is huge. Efforts done to de-stigmatize this ailment at early age – in formative years of a person, can bring about a significant change in community's perception of the disease. College-going students (of any stream) therefore are the natural target audience. In our study, such reactions were elicited. Ganguli et al also in their study in Maharashtra also reported that students' attitude towards HIV infected/AIDS patients was not sympathetic.[2] As many as 4% students before the training were of opinion to completely stop talking to an HIV sero-positive friend or to disclose his identity to other friends or were indecisive on how to deal with them. A significant and positive change was seen after training in which all such stigmatic or stigma-raising attitudes were abolished completely. Also, willingness to provide support to such friend was raised from 62% to 96%. [Chart II]

CONCLUSION

Several studies have identified the need of school or college-based sexuality and STDs (especially HIV/AIDS)-oriented training programs. Leena A et al note that traditional norms and the role of the family are losing their importance in governing young people's sexual behaviour in India. [5] In such changing scenario, dissemination of right messages during formative years is imperative in the fight against HIV/AIDS and hence NACP IV has identified BCC as one of their prime objectives. Preventive approach pivoting around correct technical, programmatic and health-seeking behaviour related knowledge along with focused strategies on de-stigmatization of the disease is far more rewarding in all ways than the management-centric approach. Short, on-hand trainings covering these aspects must be incorporated in the academic curriculum of all streams of college students mainly as risk-reduction approach. Periodic reinforcement of such training is also to be included in the curricula of students. Right messages with right content at right timedirected towards behaviour change will go a long way in the fight against HIV/AIDS.

STUDY LIMITATION

Present study was carried out among the commerce students of only one college. Similar studies with same objectives can be carried out among students of other streams like arts, engineering, medicine etc. and based on the wider gamut of results; more specific recommendations can be made and incorporated among subsequent training material formulation.

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CONFLICT OF INTEREST

Nil. The study was neither funded nor financially assisted by any organization or agency.

Table I - Gain of knowledge in technical questions on HIV/AIDS after training

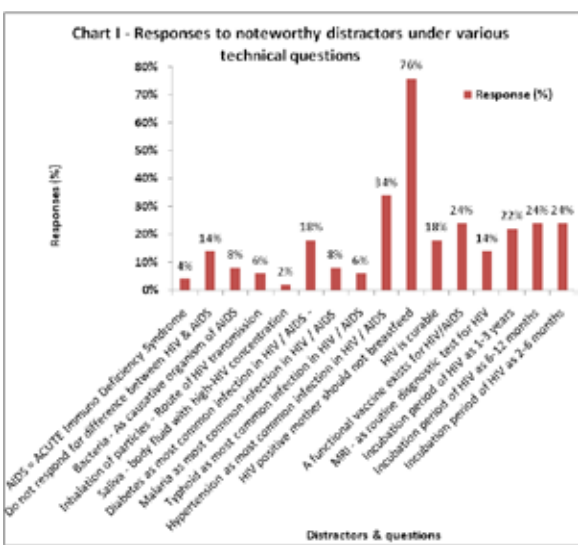
Sr. No.	Questions	Gain in correct knowledge (%)
1	Body fluid with highest concentration of HIV	66
2	If drugs are available for HIV/AIDS or not	66
3	Incubation period of HIV	66
4	Indicator cells for HIV prognosis	64
5	Most common infection in HIV / AIDS	52
6	If there is any difference between HIV and AIDS	46
7	Clinical features of the disease	46
8	Test used for routine HIV detection	46
9	If a functional vaccine exists for HIV/AIDS	24
10	If contact of HIV positive blood to healthy skin can result into transmission of infection	22
11	Causative organism for AIDS	18
12	If HIV/AIDS is curable or not	18
13	Pathogenesis of AIDS	16
14	If HIV positive mother should breastfeed or not	16
15	How to prevent HIV transmission?	14
16	Routes of transmission of HIV	6
17	What does AIDS mean?	4
18	If have heard about HIV/AIDS	0

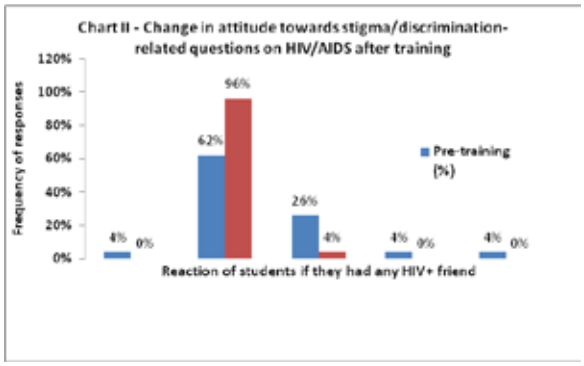
Table II - Gain of knowledge in programmatic/ service delivery questions on HIV/AIDS after training

Sr. No.	Questions		Gain in correct knowledge (%)
1.1	Place for AIDS drug distribution in Ahmedabad	Civil Hospital	62
1.2		VS Hospital	90
2	Places for HIV testing in Ahmedabad		28
3	World AIDS day		32
4	Knowledge about Red Ribbon Express		14
5	If have heard about Helpline no.		62
6	Knowledge of correct Helpline no.		54

Table III - Gain of knowledge in health-seeking behaviour-related questions on HIV/AIDS after training

Sr. No.	Questions		Gain in correct knowledge (%)
1	Preference for pre-tested blood during blood transfusion		42%
2.1	Future source of information about HIV / AIDS	HIV counselor	16%
2.2		Doctor	40%





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