

KNOWLEDGE & RISK PERCEPTION REGARDING HIV AMONG HEALTHCARE WORKERS IN A MEDICAL COLLEGE HOSPITAL

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ABSTRACT

Background: Ever since HIV was first identified in India among sex workers in Chennai during 1986, HIV infections have been reported in all states and territories. The knowledge and attitudes of healthcare workers (HCWs) in relation to HIV infection is an important factor influencing the willingness and ability of people with HIV to access care, and the quality of the care they receive.

Aims & Objective: To assess HIV-related knowledge and risk perception among a group of north Indian health care workers (HCW), and to identify predictors of willingness to provide care for patients with HIV infection.

Material and Methods: A cross-sectional survey of 450 HCWs from tertiary health care centre was undertaken in March 2011. The information was collected on a semi structured, self-administered questionnaire. Information was gathered regarding demographic details, HIV-related knowledge, risk perception and previous experience caring for HIV-positive patients.

Results: Most (95.7%) were aware of the routes of transmission. 4.1% HCWs wished that they should be allowed to refuse to care for people with HIV/AIDS. HCWs willingness to provide care for patients with HIV was strongly associated with having previously cared for patients with HIV ($P = 0.001$). Knowledge of HIV transmission and perception of risk were not associated with willingness to provide care ($p < 0.05$).

Conclusion: The knowledge of HCW was satisfactory. But periodic updates are required to enhance the knowledge of HCW. These include the development of programmes to promote occupational safety of HCWs and involving people with HIV in awareness training of HCWs.

Key-Words: Human Immunodeficiency Virus (HIV); Health Care Workers (HCW); Risk Perception; Awareness

Introduction

Ever since HIV was first identified in India among sex workers in Chennai during 1986^[1], HIV infections have been reported in all states and territories. As per NFHS 3 Nationwide, the HIV prevalence rate for the population age 15-49 is 0.28 %. This translates into 1.7 million HIV positive persons age 15-49 in India in April 2006. The HIV prevalence rate is 0.22 % for women and 0.36 % for men age 15-49.^[2] While recent report from NACO shows adult prevalence of 0.31 %, 0.25 % (women) and 0.36 % (men) with 1.2 lakh new cases every year with 1.72 lakh deaths attributable to AIDS related causes. HIV prevalence exceeds 0.5% in Manipur, Andhra Pradesh, Karnataka, and Maharashtra.^[3] Although the spread of HIV/AIDS is a major concern in India, only 61 % of women age 15-49 and 84 % of men age 15-49 have heard of AIDS. While awareness of AIDS has increased over time among both rural and urban women, Nationwide, only 17 % of women and 33 % of men have 'comprehensive knowledge' of HIV/AIDS.^[2]

Knowledge and beliefs about HIV/AIDS affect how people treat those they know to be living with the infection. In India, as in many other countries, people with HIV frequently encounter discrimination when seeking and

receiving health care services, with serious adverse consequences for their physical and psycho-social well-being.^[4] The knowledge and attitudes of healthcare workers (HCWs) in relation to HIV infection is an important factor influencing the willingness and ability of people with HIV to access care, and the quality of the care they receive.^[5] The lack of universal adherence to infection control protocols, such as injection safety, poses a great risk for healthcare workers of occupational HIV infection at virtually every level of their daily work.^[6] How HCWs perceive their own risks in relation to caring for HIV-positive patients potentially influences their willingness to provide care.

Several studies have explored HIV/AIDS knowledge, attitudes and practices (KAP) of healthcare workers in developing countries. Results revealed existence of anxiety and fear of contagion accompanied by lack of knowledge on HIV transmission and methods of prevention.^[7,8] The present study was conducted to assess HIV-related knowledge and risk perception among a group of north Indian HCWs, to identify predictors of willingness to provide care for patients with HIV infection.

Materials and Methods

A cross-sectional survey of 450 HCWs from tertiary health care centre (MMIMSR, Mullana) was undertaken in March 2011. The information was collected on a pretested, semi structured questionnaire. The Information was gathered regarding demographic details, HIV-related knowledge, risk perception and previous experience caring for HIV positive patients. All the HCWs of the MM Medical college hospital, Ambala who were willing to participate were included in this study. The HCWs who were absent during study period or not willing to participate were excluded from the study. All collected data was entered in MS excel & Result was analyzed using SPSS 11.5 version. Appropriate statistical test were applied.

Results

Among our study participants 56% were nurses, 22% doctors, 17% lab tech. & 5% OT tech. Most (95.7%) were aware of the routes of transmission. But 13.2% also implied coughing and sneezing as the route of spreading HIV/AIDS. 72% knew that universal precaution can prevent transmission, yet 73% had perception that caring a HIV positive patient is high risk. 13.2% HCWs asserted to have a high risk of catching blood born viruses (BBV) (such as HIV/AIDS and hepatitis B) while caring for patients Only 64% HCWs considered post exposure prophylaxis effective while as many as 16% feel it be ineffective. (Figure 1)

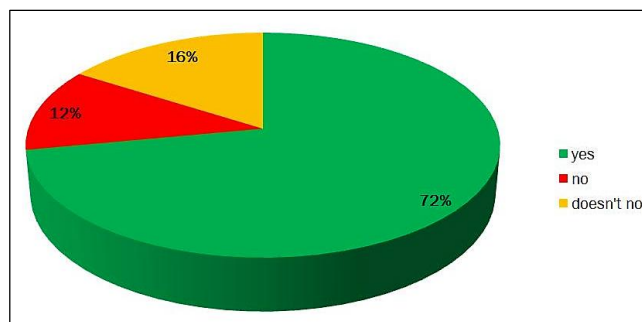


Figure-1: Response to universal precaution can prevent transmission

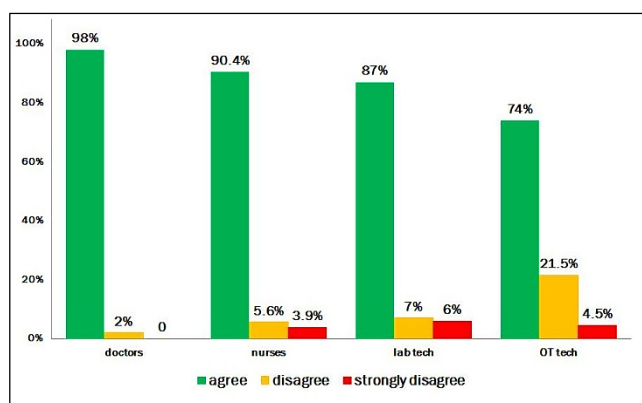


Figure-2: Response to would like to care HIV positive

A high proportion of HCWs (almost 95%) felt that all surgical and obstetric patients should be routinely tested for HIV infection. In our study 88% HCWs have earlier cared a HIV positive patient. Figure II shows willingness to care among HCWs. 4.1% participants wished that HCWs should be allowed to refuse to care for people with HIV/AIDS. After controlling for confounding, HCWs willingness to provide care for patients with HIV was strongly associated with having previously cared for patients with HIV ($P = 0.001$). Knowledge of HIV transmission and perception of risk were not associated with willingness to provide care ($p < 0.05$).

Discussion

Most (95.7%) were aware of the routes of transmission. But 13.2% also implied coughing and sneezing as the route of spreading HIV/AIDS. While taher et al reported similar results among nurses from Egypt.^[6] Similarly kermode et al in his study among HCWs of rural south India observed that participants were generally aware of the ways in which HIV can be transmitted, their knowledge of how HIV is not transmitted was often incomplete.^[5]

Among our participants 72% knew that universal precaution can prevent transmission, similarly K. Vaz, D. McGrowder, et al reported that 64.0% of the health care workers had knowledge of universal precautions.^[9] It is very important that health care workers have good understanding about the risk of blood-borne pathogens at work place and about the preventive measures for reducing risk. In our study 13.2% HCWs asserted to have a high risk of catching blood born viruses (BBV) (such as HIV/AIDS and hepatitis B) while caring for patients Vaz & McGrowder, et al had similar observation in their study.^[9]

73% of our study participants had perception that caring a HIV positive patient is high risk. Kermode et al reported that majority (63%) HCW perceived their risk of occupational infection with HIV as 'high'.^[5] Only 64% HCWs considered post exposure prophylaxis effective while as many as 16% feel it be ineffective. Our results are comparable to Mathewos et al.^[10] A high proportion of HCWs (almost 95%) felt that all surgical and obstetric patients should be routinely tested for HIV infection. This finding was in coherence other studies.^[5,11]

In our study only 4.1% participants wished that HCWs should be allowed to refuse to care for people with HIV/AIDS, this was much less than as reported 15% by Kermode et al^[5] & 25% by Lal P^[11] After controlling for confounding, HCWs willingness to provide care for

patients with HIV was strongly associated with having previously cared for patients with HIV ($P = 0.001$). Knowledge of HIV transmission and perception of risk were not associated with willingness to provide care ($p < 0.05$). An earlier Indian study also found that HCWs HIV-related knowledge and attitudes did not predict their willingness to care.^[12] Previous studies have also identified a connection between prior contact with HIV-positive patients and a more tolerant attitude.^[5,13]

Conclusion

The overall knowledge of the HCWs surveyed was good, certain misconceptions were noted. Periodic updates are required to enhance the knowledge of HCW. These include the development of programmes to promote occupational safety of HCWs and involving people with HIV in awareness training of HCWs.

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