

HIV Related Knowledge & Attitude among Nurses and Paramedical Health Care Providers in Delhi

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Abstract:

Currently, estimated 2.1 million people in India are living with Human Immunodeficiency Virus (HIV) infection. This study will discuss about the knowledge and attitude regarding HIV transmission among paramedical staff as they are coming directly in the contact with patients in out-patient department (OPD), in-patient department (IPD) and operative cases. The study was conducted with 94 paramedical staff of 36 small and medium level private health care facilities in Delhi. The study finds that knowledge about the infection of HIV is quite poor among nurses and paramedics staff in healthcare settings. The attitude of the staff was also not found on positive side. This study recommends that a rigors information, education, and communication program should be implemented in the healthcare settings

Keywords: Paramedical staff, Knowledge and attitude, HIV infection, Stigma and discrimination.

1. Introduction

India is the second largest country with the population and having the third position for HIV prevalence 0.30% in the world (Makhado & Maselesele, 2016). South Africa is reported to the largest population of people living with HIV in the world. HIV virus occurred in 1981 in and converted into the epidemic in the early stage of identification of it. Currently, estimated 2.1 million people in India are living with this infection but the good thing is that the rate of prevalence is decreasing continuously. This study will discuss the knowledge and attitude regarding HIV transmission among paramedical staff (Auxiliary Nursing Midwifery, General Nursing Midwifery, Laboratory technician and Operation theatre technician) who are coming directly in the contact with patients in out-patient department (OPD), in-patient department (IPD) and operative cases. In the Indian scenario, most of the time, patients do not disclose their HIV status with the health caregivers due to fear of denial of health services or breach the confidentiality. In this condition, paramedical and medical staffs are most at risk of

HIV transmission in health care system. The rate of HIV transmission during exposure is 0.05% and it contributes in HIV transmission globally 0.01% (Agrawal, Saoji, & Kasturwar, Knowledge among Nurses towards HIV/AIDS in Tertiary Care Hospital, Nagpur, 2013).

1.1 Problem statement

Paramedical staffs are pillar of health system across the globe. Also, these staff members are most at risk of exposure during providing the care, support, treatment to the patients. The nursing and paramedical staffs (OT technician, Laboratory technician, Emergency medical technician, X-Ray & ECG technician, Pharmacist, Eye technician) have their different and very important roles in the health facilities and most of them are very much on the risk of HIV transmission. The duties of paramedical staff involving the tasks like collecting samples (blood, semen, stool, cerebrospinal fluids etc.), medication through intravenous, intramuscular, oral etc., disposal of used needles, syringes, instruments used during procedures and handling the sharp objects in operation theatre,

outpatients, inpatients etc., poor sanitation and inappropriate use of universal work precautions etc. It is also observed that most of the paramedical staff has needle prick injuries during their duties but they did not look serious about the universal work precautions and only this reason makes them highly vulnerable to the HIV infection (Agrawal, Saoji, & Kasturwar, Knowledge among Nurses towards HIV/AIDS in Tertiary Care Hospital, Nagpur, 2013). The knowledge, attitude and practices can help them in the prevention of HIV infections at their workplace.

1.2 Objectives of the study

1. To assess the knowledge level of paramedical staffs about the HIV/AIDS in health facilities in Delhi.
2. To assess the attitude of paramedical staffs in health facilities while caring people living with HIV/AIDS in Delhi.

2. Review of literature

A study on Knowledge among Nurses towards HIV/AIDS in Tertiary Care Hospital, Nagpur shows that only 34 percent nurses have very low understanding about HIV/AIDS and that is not good for healthcare professionals (Agrawal, Saoji, & Kasturwar, Knowledge among Nurses towards HIV/AIDS in Tertiary Care Hospital, Nagpur, 2013). An another study on knowledge, risk perceptions and attitudes of nurses towards HIV in a Tertiary Care Hospital in Mangalore, India (Achappa, et al., 2005) elaborates that there were untruthful theories and insufficiencies existing among nurses about the transmission of HIV infection.

A study on HIV-related knowledge, attitudes and risk perception amongst nurses, doctors and other healthcare workers in rural India (Kermode, Holmes, Langkham, Thomas, & Gifford, 2005) reveals that the attitude and knowledge of any

health care provider is affected the readiness and aptitude of the client who is living with HIV to taking the quality health care services. So, the attitude and knowledge of health care provider must be sufficient and client friendly. This study also elaborates the concern of nurses and paramedical staff that the prevalence of HIV is growing in India and the involvement of health care provider in serving the clients is increasing simultaneously. Their role in HIV prevention and care accomplishments such as PMTCT (Prevention of Mother to Child Transmission of HIV), prevention of HIV infection via blood or blood products, treat the HIV related illness is increasing. In this situation, all the nurses and paramedical staff must use the universal work precautions.

Another study (Gupta, et al., 2008) conducted in India showing that only 58 percent of the hospital staffs were aware of the HIV infection and also they were unaware of disinfecting the instruments, pre-exposure prophylaxis or post-exposure prophylaxis of needle prick injury and universal work precautions. They were having myths about the route of HIV transmission too. The study reveals the prevailing misconception about HIV transmission among hospital staff like HIV can be transmitted through mosquito bites, shaking the hand, sharing utensils, toilets, and clothes with HIV positive patients.

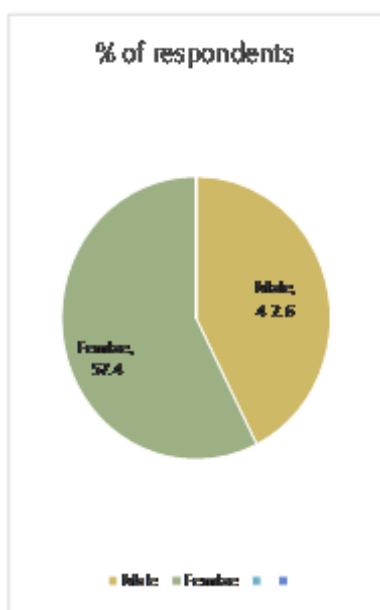
3. Research Methodology

A quantitative study designed to assess the knowledge and attitude of nursing and paramedical staff of private healthcare facilities in Delhi. A twenty-seven items self-administered pre-tested and structured questionnaire about knowledge and attitude towards HIV and HIV positive patients was developed. The questionnaire was designed in a dual language in Hindi and English. The questionnaire was divided into three parts. The first

part contains the basic information of respondents like age, qualification, and experience. The second part of the questionnaire was containing 18 questions, discussed knowledge and full form of HIV and AIDS, and routes of HIV transmission. The third part of the questionnaire was about the attitude of respondents towards HIV positive clients. The universe of the study was Delhi. Total 36 hospitals were visited for data collection and 94 samples were collected. The respondents were selected by convenience sampling. Respondents who were present at the time of study and have time to fill the questionnaire and also given verbal consent to participate in the study. Before initiation of data collection from the field, the questionnaire was tested with 7 nursing staff and finalized by incorporating their suggestion. Total 239 respondents were approached for data collection but 94 participants participated in the study with their consent.

Exclusion criteria: The paramedical staff working in the private health facilities and who have not given their consent for participation in the study will be excluded from the study.

Figure 1: Distribution of respondents according to gender

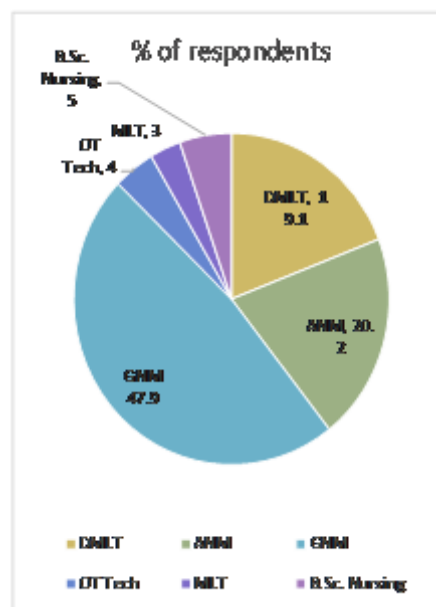


Inclusion criteria: The paramedical staff working in the private health facilities and who have given their consent for participation in the study will be included in the study.

4. Results

Total 239 participants were approached for the interview, 94 gave their verbal consent, available and answered the questionnaire. Majority of the respondents are from the age group of 25-34 years (66%). The mean age of the respondents is 29.30 (N= 94). Out of the total, the majority of the respondents are female (57.4%). The different qualification background has noticed in the study. The majority of the respondents are Diploma holders such as GNM (47.9%), ANM (20.2%) and DMLT (19.1%). Rest of them are OT technician, B.Sc., and MLT holders. 47.9% staffs are experienced 4-8 years and 33% staffs are experienced 9 or more than 9 years. Only 19.1% staffs are having 1-3 years of experience in the private health sector.

Figure 2: Distribution of respondents according to professional education



The staffs of private hospitals were interviewed with a pre-tested questionnaire. In the knowledge part of the questionnaire, the full form of HIV and AIDS were asked. 80.9% respondents gave the correct answer and 17% respondents left blank as they did not have any idea about that. On the other hand, only 39.4% respondents gave the correct answer of full form of AIDS which is almost half in comparison of the correct answer for full form of HIV. Most of the respondents were found confused about the difference between HIV and AIDS. Majority of them 63.8% believe that HIV and AIDS are same. Almost all respondents 96.8% know that unprotected sexual acts can cause HIV transmission. This study propounds that myths and misconceptions related to HIV transmissions widely

exist among paramedical health workers. 52.1% respondents believe that HIV can be transmitted through the mosquito bite. 9.6% respondent believes that it can transmit through coughing and sneezing 13.8% respondent does not know about this route. 100% respondents are aware that needle stick injuries of the Sero-positive case can transmit HIV infection. 91.5% respondents are aware that HIV can transmit from mother to Fetus during pregnancy. Only 45.7% respondents believe that HIV positive mother can breastfeed the baby. 68.1% respondents know that saliva or tears cannot be the root cause of HIV transmission. 53.2% participants do not believe that CSF can be the route of HIV transmission.

Table 1: Percentage of correct answers about knowledge of HIV

Question	Correct answers in percentage
1. Full form of HIV	80.9%
2. Full form of AIDS	39.4%
3. Are HIV and AIDS both are same	33.0%
4. HIV can transmit through Unsafe sexual contact	96.8%
4.2 Sharing cup, plates, spoon	72.3%
4.3 Urine contact	69.1%
4.4 Mosquito bite	40.4%
4.5 Coughing and sneezing	76.6%
4.6 Contact with feces	71.3%
4.7 Contact with saliva & tears	68.1%
4.8 Contact with sputum	72.3%
4.9 Sharing of toilet seats	76.6%
4.10 Cerebrospinal fluids (CSF)	46.8%
4.11 Contact with blood or blood products (RBCs, WBCs, Platelets)	97.9%
4.12 Needle stick injuries (NSIs)	100%
4.13 Infected woman to her child during pregnancy and birth	91.5%
4.14 Needles/syringes among drug users (IDUs)	98.9%
5 Can HIV positive mother breastfeed the baby	45.7%

Table 2: Association between Knowledge on HIV and gender of respondents -

Variables	Poor Knowledge in (%)	Average Knowledge in (%)	Good Knowledge in (%)	p-value
Gender				
Male	16 (17.2)	17 (18.3)	7 (7.5)	*0.04
Female	27 (29)	10 (10.8)	16 (17.2)	

*p-value <0.05 = Significant

The data analysis reveals knowledge about HIV among respondents and it is found that almost half (45.7 percent) of respondents have poor knowledge whereas 28.5 percent and 24.5 percent have average and good knowledge about HIV respectively. The cross-tabulation between

knowledge level and gender of respondents depicts very important information that female respondents have better knowledge about HIV (17.2 percent) in compare to male (7.5 percent).

Table 3: Association between Attitude and working experience of respondents

Variables	Favorable Attitude n (%)	Unfavorable Attitude n (%)	p-value
Work experience (in years)			
1-3	5 (5.3)	13 (13.8)	*0.045
4-8	21 (22.3)	24 (25.5)	
9 and above	18(19.1)	13 (13.8)	

*p-value <0.05 = Significant

More than half (53.2 percent) respondents are having the unfavourable attitude towards PLHIV. Cross-tabulation flashes the light on this attitudinal aspect among

5. Discussion & Conclusion

Inadequate knowledge and unfavourable attitude can act as obstruction in the care and treatment for people who are living with HIV infection. As all knows that there is no cure available for prevention of HIV infection. Poor knowledge regarding route of transmission and treatment can be the reasons of stigma and discrimination in healthcare settings. The findings of this study reveal that still; stigma is exists among the primary health care service providers. Like many of participants responded that infection can be transmitted through urine contacts, coughing and sneezing, in contacts with faces, saliva, and tears and sharing the toilet seats. This study shows that knowledge of paramedics is slightly poor and different types of myths and misconceptions regarding the route of HIV transmission are there. Out of total respondents, 10.6% have myths that HIV can spread through contact with faeces of HIV positive client. And, 18.1% respondents do not have any idea about this. Similarly, 16% replied that saliva and tears can be the cause of transmission and another 16% do not sure about this and

respondents that unfavourable attitude shifts towards favourable attitude over the time.

they marked don't know the answer. Next questions were about the sputum. Can sputum be the cause of transmission? 12.8% participants agreed that sputum can be the cause and 14.9% respondents marked don't know. The study found that there are very common myths are exists among paramedics and it can affect the attitude and potential of health care provider when it comes to giving care and treatment to HIV positive clients. This study also explores the knowledge regarding sharing toilet and utensils can transmit the HIV infection from one another? Among 94 respondents, 9.6% responded that sharing toilet can transmit and 16% agreed that sharing of the cup, plates or utensils transmit the HIV infection. Complete knowledge about the route cause HIV transmission is not only very essential for minimizing the chances of transmission rate, but it is also very significant to disperse myths and misconceptions as poor or limited knowledge can supplement extend the HIV infection. (Taher & Abdelhai, 2011). As the knowledge reveals that almost half of the total participants have the very poor knowledge and same results are in the attitude part.

This study found that the knowledge about the infection of HIV is quite poor as 45.7% respondent have poor and 28.5% have average knowledge among nurses and paramedics staff in healthcare settings. And the attitude of the staff is neither favourable nor unfavourable. We recommend that a rigors information, education, and communication program should be implemented in the

healthcare settings. It is also recommended that some sessions must be on HIV related stigma, discrimination, myths and misconceptions so that facility can provide the stigma-free environment and better care and support to people who are living with HIV and taking services from private healthcare settings.

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