

Knowledge, Attitude and Practice Survey of Acquired Immune Deficiency Syndrome (AIDS) Among Paramedicals in a Tertiary Care Hospital in Pakistan

Pages with reference to book, From 200 To 202

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Abstract

A knowledge, attitude and practice survey of acquired Immune Deficiency Syndrome (AIDS) was conducted among 805 paramedics at a tertiary care hospital in Islamabad in mid 1993. The mean age of the study population was 29.0 ± 7.2 years and 59% were males. Almost 25% individuals either had no or upto primary level education. Initial response of 10% subjects was not having heard of AIDS and 70% thought their knowledge was sketchy, while 43% could not mention any cause for the disease. Almost 50% did not know that HIV infection could be asymptomatic.

With respect to attitudes about AIDS, 30% subjects thought that changing life style shall have no effect on avoiding AIDS, 50% were of the view that at present AIDS did not pose a significant threat to them and 4% individuals however, admitted to having risk of contracting the disease.

There existed significant gaps in the knowledge and attitudes of paramedical staff about AIDS and correlated with the level of education of the staff. These deficiencies need to be addressed through developing health education packages in local languages, targeted especially towards paramedical staff (JPMA 45:200,1995).

Introduction

It is over 13 years since AIDS was first recognized and the rapid global spread of the disease has caught governments, communities and health care personnel unprepared. The response AIDS has evoked world-wide varied from the compassionate and energetic provision of care, support and education to restrictive and coercive displays of prejudice and fear. AIDS has not just entered this country, it is now implanted as an indigenous disease and a part of our hospital practice. The projected figures for the existing number of HIV-AIDS cases in Pakistan is anywhere between 20,000-50,000¹. A sympathetic as well as enlightened response from our health care workers at all levels in the care and management of HIV (Human Immunodeficiency Virus) infected as well as AIDS patients is essential. The health care worker not only should be sympathetic in caring for the AIDS patient, be well informed about the diverse aspects of the disease and be well versed in protecting herself/himself from contracting the disease. Numerous knowledge, attitude, belief and practice (KABP) studies have been carried out on health workers in different parts of the world²⁻⁴. The objective of this study was to assess the KABP related to AIDS of health care workers, particularly the paramedical and allied staff, in a tertiary care hospital in Islamabad. Such a study would identify existing weaknesses in the KABP of paramedical staff regarding AIDS. In addition, it may be useful in preparing a health education package on HIV/AIDS targeted at the group of health care personnel working in hospitals.

Subjects and Methods

A survey was conducted in mid-1993, to assess the KABP of paramedical personnel working at the Pakistan Institute of Medical Sciences, Islamabad. This study conducted on paramedical and allied

personnel, included student and staff nurses, technicians working in various departments of the hospitals, nursing assistants as well as some of the auxiliary staff. A sample size of 800 individuals was considered sufficient. Hospital staff were categorized as those with "high" educational background, when they had completed secondary or higher level of education and "low" education background, if they had only done primary or were illiterate. A questionnaire was prepared to assess knowledge, attitude, behaviour and practice of the study subjects on AIDS, translated into Urdu, field tested and then modified according to the feedback from the field test. Two female community health nurses and two male paramedical employees of the hospital were recruited and trained to administer the questionnaire. The administering of questionnaire by the interviewers was continuously supervised by a physician. Data from the questionnaires was then entered on a microcomputer using EPIINFO version 5.0 and then analyzed. Only where necessary, aX2 test was performed for companng groups.

Results

A total of 805 individuals wete assessed.Of these 59% were males with a mean age of 29 ± 7.2 years. The age range for the selected sample was fmm 17-59 years (Figure).

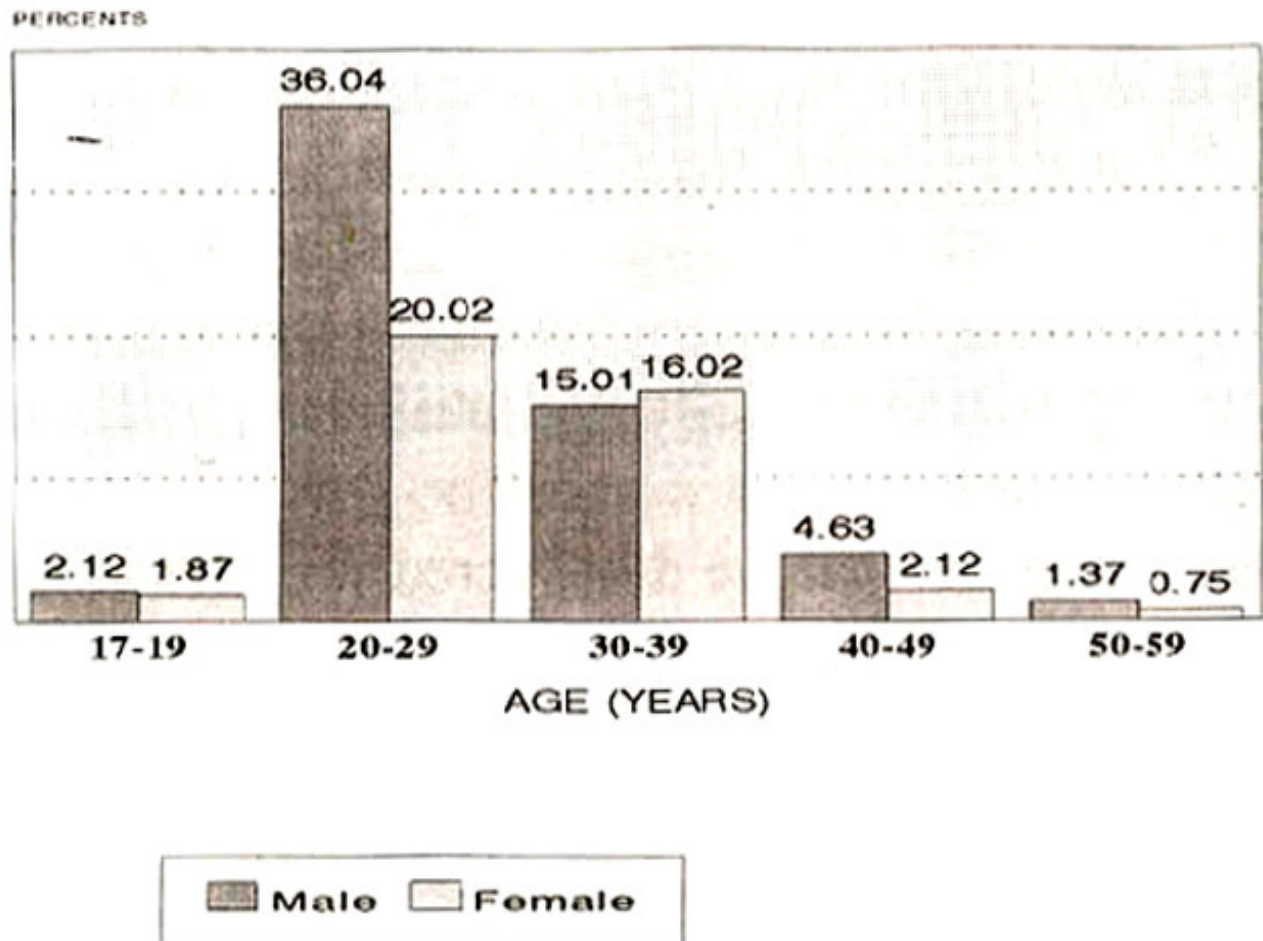


Figure. Distribution of respondents by age and sex.

Categories of individuals interviewed included 54% paramedics, 33% nurses and 13% auxiliary staff. Analysis of subjects by religion revealed 25% to be Christians. predominantly nurses. 75% Muslims and less than 1% from other religions including Hindus. The educational characteristics of the study

population were also assessed, 23% of employees had either none or primary education, 44% had secondary and 33% had acquired higher education. The initial response on whether individuals had heard about the disease was 10% in the negative. A good 70% considered their knowledge on AIDS to be sketchy. When inquired as to the principal causes of AIDS 43% could not mention any (Table I).

Table I. Knowledge on AIDS.

Do Not Know	43%
Sex	17%
Sex, Blood and Syringes	14%
HIV	13%
Virus	9%
Miscellaneous	4%
	100%

Thirty one percent identified it only as a sexually transmitted disease, whereas 14% mentioned sex, blood transfusion and syringes. 22% suggested a viral etiology and of these 13% named the HIV virus. No one suggested likely transmission of disease from the mother to fetus. A detailed evaluation of the knowledge status of the study subjects is given in Table II.

Table II. Knowledge status about AIDS.

Questions	Yes (%)	No (%)	Do not know (%)
Can HIV infection be asymptomatic?	52	26	22
Can HIV infection be transmitted through an apparently healthy person?	71	15	14
Can HIV infection be transmitted by touching an AIDS patient	22	66	12
Can HIV infection be transmitted by sharing a cup?	29	63	7
Can HIV infection be transmitted through syringes?	92	4	4
Can a person catch AIDS by having sex with a prostitute?	95	2	3
Can a person catch AIDS by having sex with an AIDS patient?	95	2	3
Can a person catch AIDS by receiving HIV infected blood?	95	1	4
Can a person get AIDS through insect bites?	47	36	17
Can a mother transmit HIV infection to her new born	85	6	9
Can AIDS be transmitted by wearing clothes of an AIDS patient?	40	48	12

Almost 50% of hospital staff either did not know or said that HIV infection cannot be asymptomatic. When asked specifically, 90% of study subjects seemed to have adequate information regarding modes of transmission of the disease through sex, parenterally and from mother to fetus. There were, however, major gaps in their knowledge as to how the disease could not be transmitted, 64% of the subjects either did not know or thought that HIV infection could spread by insect bites. Similarly 40% subjects were of the view that AIDS could be transmitted by wearing clothes of an AIDS patient and another 12% had no clue about the mode of transmission. Finally 34% of the hospital staff presumed that HIV infection can be transmitted by touching an AIDS patient, or had no knowledge about it. Knowledge about AIDS was closely associated with the level of education. For instance, whereas 95% of the paramedicals with secondary or higher level of education expressed that AIDS is transmitted through sharing syringes, only 80% hospital employees with under primary or no educational background gave

the same answer ($p < 0.001$). Similarly when asked about the potential of disease transmission through commercial sex workers or by touching AIDS patients, there was significant effect of the level of education on the knowledge status (Table III).

Table III. Knowledge on AIDS by Educational level.

Variable	Response	Educational level		p-value
		High (%)	Low (%)	
Can you get AIDS by touching	Yes or do not know	26	60	<0.001
Can you get AIDS by having sex with commercial sex workers?	Yes	98	88	<0.01
Can you get AIDS by sharing syringes?	Yes	95	81	<0.001

Attitudes and behaviours of the hospital employees regarding AIDS and HIV disease were also assessed. Sixty three percent discussed the subject of AIDS freely among friends, only 14% discussed such issue within the family. When questioned as to whether AIDS can be avoided by changing life styles, more than 30% responded negatively. Over 50% individuals thought that at present AIDS either poses no threat or only a minor one. When asked about dangers of the disease to our community in coming years, 26% still recognized either no or a minor threat. Interestingly 4% of the hospital staff conceded that they have a serious risk of contracting the disease, 13% admitted to having some risk and 11% did not know about it.

Discussion

Paramedical staff along with doctors are major health care providers in our hospitals. Reluctance to care for AIDS patients has been observed world-wide wherever AIDS patients are seen. Indeed, hospital staff need to have comprehensive instructions about AIDS, the many manifestations of both the disease itself and the pandemic. In this study 10% of hospital paramedical staff on initial interrogation expressed not having heard about AIDS. This is unacceptable, while for the other 90% who had heard of AIDS, there existed significant gaps in their knowledge and attitude about AIDS which should be filled. This gap was significantly more in individuals with low level of education working in hospital environment. A similar study⁵ identified predictors of nursing and medical students' levels of HIV-AIDS knowledge and their resistance to working with AIDS patients. The results revealed that lack of clinical experience with AIDS patients and anti-homosexual attitudes were significantly associated with low levels of knowledge. In our study within the group of staff with "higher educational status", the sub-group of nurses had major shortcomings in their attitudes about AIDS patients. Nurses in our hospitals are responsible for administering the major portion of direct health care to

AIDS patients. Unless the pre-service curriculum of nurses as well as other paramedicals adequately covers the subject of AIDS and HIV infection, including psychosocial, ethical and legal issues, their knowledge level shall remain poor and attitudes apathetic. A survey undertaken in New Zealand⁶ examined nurses' attitudes to matters relating to management of patients with AIDS and the prevention of HIV infection showed strong support for current AIDS related public health measures. The nurses had a high level of knowledge and awareness about AIDS and believed that AIDS patient should be treated no differently than other disease sufferers. As shown in this study, 70% of the respondents thought that their knowledge on AIDS was sketchy and 43% failed to suggest a cause for the disease. These are extremely high proportions for any hospital staff and more so in a teaching hospital. Moreover, the hospital staff had major misconceptions about ways through which AIDS could not be transmitted. This should be addressed through developing suitable health education packages in local languages, targeted towards paramedical staff. Another rationale for providing health education to the hospital staff is that 17% expressed some risk of contracting the disease themselves and another 11% had no knowledge about it. One can assume that gaps in KAP of medical personnel working in othersimilar and lower grade hospitals are perhaps even worse. There is thus a pressing need to launch a determined and courageous health education campaign for our hospital staff not only in the teaching hospitals but also at district and lower level health care institutions. Although this study does not assess the KAP of physicians, there is evidence that physicians working in hospitals as well as those in general practice not only in this country but other countries as well^{7,8}, require to improve their skills and attitudes vastly towards HIV-AIDS patients. One limitation that we discovered was that interviews could have been more open and candid particularly discussing attitudes and behaviours than were kept in this study. This has been taken care of in our subsequent KAP studies that are at present being conducted in some of the HIV-AIDS high risk groups. Finally, HIV infection and AIDS is a reality in this country and is going to get ever more common. Sensitizing the hospital staff to the various aspects of disease through an active health education programme is crucial if we are to succeed in the endeavor to successfully control the disease. An equally important fact is that this study indirectly reflects the KAP of the general population about the catastrophic nature of this disease. Something for the medical community and health planners to think about!

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