

A Study Of Awareness on HIV/AIDS among Sanitary and Security Workers in a Tertiary Care Hospital in KGH / AMC, Visakhapatnam, Andhra Pradesh

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Abstract:

Introduction: In the current HIV/AIDS era, understanding the mode of infection and its impact on individuals' lives, particularly among security and sanitary workers in tertiary care hospitals, is imperative. This study aims to assess the socio-demographic profile and knowledge of HIV transmission modes in workers, along with the preventive measures they follow during their hospital duties.

Materials and Method: A cross-sectional hospital-based study was conducted among all available sanitary (301) and security staff (148) at KGH/AMC, Visakhapatnam.

Results: Indicate that the majority (96.3%) of participants are aware of AIDS as a lethal disease, and most (86.5%) perceive HIV as more contagious than HBV. While 81.4% are unaware of asymptomatic HIV-positive individuals, all recognize unprotected intercourse as a transmission route. However, awareness of mother-to-child transmission (84.8%) and transfer via blood products (59.1%) is quite poor. Only 62.2% of participants believe HIV is a significant public health issue, yet all agree that HIV screening for hospitalized patients is necessary. On the other hand, social engagements such as dining with HIV/AIDS patients are often denied (86.1%), indicating stigma. Nonetheless, the majority (99.3%) have a positive attitude and a desire to learn more about HIV/AIDS.

Conclusion: This study emphasizes the importance of targeted education and awareness efforts to bridge knowledge gaps and reduce stigma among sanitary and security staff in healthcare settings.

Keywords: Awareness, HIV, AIDS, Sanitary Workers, Security Workers.

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Introduction

India has the third-largest HIV burden globally, with approximately 2.4 million individuals living with HIV as of 2022 [1,2].

Acquired Immunodeficiency Syndrome (AIDS), stemming from Human Immunodeficiency Virus (HIV) infection, is a significant global health challenge, particularly prevalent in Africa and a leading cause of mortality worldwide.

Despite advancements in prevention, diagnosis, and treatment, HIV/AIDS remains a substantial burden, with millions affected and millions more at risk [3]. Healthcare workers, including sanitary and security staff, face occupational hazards due to potential exposure to HIV. However, studies on HIV

awareness among these specific populations are limited in India [4,5].

This study aims to fill this gap by assessing the socio-demographic profile, knowledge of HIV transmission modes, and adherence to preventive measures among sanitary and security workers in a tertiary care hospital. By understanding and addressing the awareness gaps, interventions can be tailored to improve HIV/AIDS education and prevention efforts among these crucial healthcare support staff.

This research marks the first large-scale study in India to evaluate HIV awareness among sanitary and security workers, incorporating longitudinal

data to provide comprehensive insights into changing awareness levels over time.

Materials and Method: A cross-sectional hospital-based study was conducted among all available sanitary (301) and security staff (148) working at KGH/AMC, Visakhapatnam in the Dept. Of Dermatology during January 2023 to June 2023. Informed consent was obtained from participants, and upon acceptance, they were included in the study.

Data collection involved the use of a pretested semi-structured questionnaire, gathering information from all study participants. This

approach ensured comprehensive data collection on socio-demographic profiles, knowledge of HIV transmission modes, and adherence to preventive measures among sanitary and security workers.

Statistical Analysis: The data was initially entered into a Microsoft Excel spreadsheet and later analyzed using Jamovi (version 2.3.28) software. Frequencies and percentages were computed for categorical variables such as awareness of AIDS, perception of HIV contagiousness, and knowledge of transmission routes.

Results

Table 1: Socio demographic characteristics

Category	Age Group	Frequency	Percent
Age Distribution	20-30 years	81	18.5
	31-40 years	187	42.6
	41-50 years	134	30.5
	51-60 years	37	8.4
Gender	Female	280	63.8
	Male	159	36.2
Education	Uneducated	235	53.4
	Till 10th	147	33.4
	Inter	15	3.4
	Degree	43	9.8
Total	-	439	100

Table 1: highlights on the demographic composition of the study sample, which consisted of 439 people.

Individuals aged 31-40 years (42.6%) are the most common age group, followed by those aged 20-30 years (18.5%), while those aged 51-60 years make up the smallest number. The gender breakdown

reveals a higher percentage of females (63.8%) than males (36.2%).

In terms of education, the majority of the sample is classed as uneducated (53.4%) or having finished education to the tenth grade (33.4%), with lesser proportions having intermediate (3.4%) or degree-level (9.8%) education.

Table 2: General awareness of HIV/AIDS among the study subjects

Awareness Statement	Response	N	%
i) AIDS is a Fatal Disease	Yes	432	96.3
	No	17	3.7
ii) Availability of Treatment	Yes	446	99.3
	No	3	0.7
iii) HIV is more infectious than HBV	Yes	388	86.5
	No	61	13.5
iv) A person with HIV/AIDS can get other diseases due to AIDS	Yes	241	53.7
	No	208	46.3
v) A person can be infected with HIV without knowing	Yes	83	18.6
	No	366	81.4
vi) A seronegative person can be infective	Yes	59	13.2
	No	390	86.8

Table 2: highlights the awareness levels regarding various aspects of HIV/AIDS among the study sample.

A significant majority recognizes AIDS as a fatal disease (96.3%) and acknowledges the availability of treatment (99.3%). Moreover, the majority

correctly perceives HIV as more infectious than HBV (86.5%). However, awareness regarding the potential for individuals with HIV/AIDS to develop other diseases due to AIDS is lower, with only 53.7% acknowledging this fact.

Additionally, a considerable portion of the sample (81.4%) is aware that a person can be infected with HIV without knowing, indicating a moderate level of awareness in this aspect. Surprisingly, a lower proportion (13.2%) recognizes that a seronegative person can still be infective, suggesting a gap in

understanding regarding transmission dynamics. These findings underscore the importance of comprehensive education and awareness programs to address misconceptions and promote accurate knowledge about HIV/AIDS.

Table 3: Knowledge regarding preventive measures against HIV/AIDS among the study subjects

Knowledge regarding Preventive Measures	Response	N	%
a) Unprotected Sex	Yes	449	100
	No	0	0
b) Blood & Blood Products	Yes	266	59.1
	No	183	40.9
c) Mother to Child	Yes	68	15.2
	No	381	84.8
d) Infected Syringes and needles	Yes	273	60.8
	No	176	39.2
e) Handshaking and hugging	Yes	312	69.6
	No	137	30.4
f) Sharing of Utensils	Yes	353	78.7
	No	96	21.3
g) Sharing of Tooth Brushes & Razors	Yes	449	100
	No	0	0
h) Mosquito Bites	Yes	416	92.6
	No	33	7.4
i) Social Kiss	Yes	407	90.5
	No	42	9.5
j) Use of Condoms	Yes	449	100
	No	0	0
k) Use of Gloves	Yes	449	100
	No	0	0
l) Use of Antiretroviral Therapy (ART)	Yes	448	99.7
	No	1	0.3
m) Use of Disposable Syringes and needles	Yes	449	100
	No	0	0
n) Single faithful Partner	Yes	443	98.6
	No	6	1.4
o) Vaccine	Yes	277	61.8
	No	172	38.2

Table 3: presents the knowledge levels regarding various preventive measures against HIV/AIDS.

A unanimous understanding is observed regarding the effectiveness of certain preventive measures such as avoiding unprotected sex (100%), using condoms (100%), using gloves (100%), and using disposable syringes and needles (100%). Additionally, there is a high level of awareness regarding other preventive measures; including avoiding sharing of toothbrushes and razors (100%), using antiretroviral therapy (ART)

(99.7%), and having a single faithful partner (98.6%). However, awareness levels vary for certain measures, with relatively lower percentages acknowledging the importance of measures such as preventing mother-to-child transmission (15.2%), avoiding sharing of utensils (78.7%), and considering vaccination (61.8%).

These findings underscore the necessity of comprehensive education programs that foster proper knowledge of all preventative strategies and their role in HIV/AIDS prevention.

Table 4: Attitudes towards HIV/AIDS patients among the study subjects

Attitude towards HIV/AIDS patients	Response	N	%
i) A major Public health problem	Yes	280	62.2
	No	169	37.8
ii) Every Hospital Admitted Patient should be Screened for AIDS/HIV (Both OP & IP)	Yes	449	100
	No	0	0

iii) Lunch and dining with HIV/AIDS patients are acceptable	Yes	63	13.9
	No	386	86.1
iv) Isolation of HIV/AIDS patients	Yes	317	70.6
	No	132	29.4
v) Touch and care for someone with HIV/AIDS	Yes	400	88.9
	No	50	11.1
vi) Desire further Knowledge	Yes	446	99.3
	No	3	0.7

Table 4: illustrates the attitudes towards HIV/AIDS patients among the study sample. A substantial portion of respondents recognize HIV/AIDS as a significant public health problem (62.2%), while all respondents unanimously agree that every hospital-admitted patient should be screened for AIDS/HIV (100%).

However, there is fewer acceptances of social interactions with HIV/AIDS patients, as the majority of respondents do not find lunch and dining with them acceptable (86.1%). Despite this, there is a positive attitude towards providing touch and care for someone with HIV/AIDS (88.9%). Additionally, there is a strong desire for further knowledge about HIV/AIDS among the respondents (99.3%), indicating an openness to learning and increasing awareness in this area. These findings highlight both areas of acceptance and areas where stigma and misconceptions still exist, emphasizing the importance of education and awareness campaigns to promote understanding and empathy towards individuals living with HIV/AIDS.

Discussion

The findings from various studies examining knowledge, attitudes, and practices (KAP) towards HIV/AIDS among healthcare workers offer valuable insights that correlate with the conclusions drawn from the current study. Study conducted by Poudel et al, where importance of protective measures such as masks and gloves in preventing STDs/HIV/AIDS is underscored, which emphasis on protective strategies which is evident in the current study [6]. Similarly, Gupta et al., study highlights the risk of blood-borne infections, particularly through needle stick injuries among healthcare personnel, which aligns with the awareness levels regarding HIV/AIDS transmission observed in present study [7].

The study by Yadav et al, highlights the association between the willingness to provide care for patients with HIV and prior experience in caring for such patients. This is in similar line with the current study [8]. Study conducted by Gordin et al. study demonstrates the significance of knowledge regarding AIDS in predicting positive attitudes and appropriate professional behaviour, supporting the importance of comprehensive education and awareness programs as suggested by current study

[9]. Similarly, Sal-Salihy et al. research indicates high awareness among healthcare workers, underscoring the importance of on-going education and training initiatives [10]. Kumar et al. study emphasizes the importance of integrating safe practices into the daily routine of healthcare workers, reflecting the significance of institutional support and policy frameworks in promoting HIV/AIDS awareness and prevention [11].

Temitayo et al and Famoroti et al studies sheds light on the prevalence of stigmatizing attitudes towards people living with HIV/AIDS among healthcare workers, highlighting the urgent need for stigma reduction interventions [12]. Moreover, studies conducted by Doka et al on HIV/AIDS-related stigma among health personnel and Brusaferrro et al, Ugochukwu, E.F. studies on stigmatizing attitudes towards people living with HIV/AIDS by healthcare workers emphasize the persistence of stigma and the need to address misconceptions and promote empathy [13,14,15].

This aligns with the conclusions drawn from present study, which highlighted both areas of acceptance and areas where stigma and misconceptions still exist. Addressing these issues is crucial in fostering an environment of understanding and support for individuals living with HIV/AIDS.

Overall, these studies collectively emphasize the critical role of education, training, institutional support, and policy frameworks in shaping healthcare workers' attitudes and behaviours towards HIV/AIDS prevention, care, and stigma reduction.

Conclusion

There is strong recognition of AIDS as a fatal disease and awareness of treatment availability; gaps exist in understanding transmission dynamics and some preventive measures. Attitudes reflect recognition of the disease's public health significance, but stigma persists, particularly in social interactions. Comprehensive education programs are essential to address misconceptions, promote accurate knowledge, and foster empathy towards individuals with HIV/AIDS. By reducing stigma and improving understanding, such initiatives can enhance HIV/AIDS prevention and care efforts, leading to better health outcomes and

quality of life for affected individuals and communities.

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