

# Assessing Perception and Knowledge regarding HIV and AIDS among High School, College and University students of South Punjab, Pakistan

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## Abstract

Assessing Perception and Knowledge regarding HIV & AIDS of youth mostly in colleges and universities has become of extreme importance and concern. Most of the students have inadequate knowledge towards high risk group for HIV infection and AIDS.

A cross-sectional study was conducted using a random sampling technique of 300 students in randomly selected high school, colleges and universities of the targeted district of Multan. This recent study was carried out to determine the understanding, common perception and knowledge of educated youth about HIV and AIDS across high schools, colleges and universities of the South Punjab. Data was obtained using structured and standardized questionnaire along with its focus group discussions, face to face interviews and observations were also held among students of different educational institutions.

This study depicted that students had just basic awareness regarding the infection, although most of the students have heard about HIV and AIDS yet 45% of them think that HIV transmitted through sexual intercourse. Moreover myth was there regarding its transmission. About 20% of the students don't know how many people were living with HIV in Pakistan; similarly 56% of students even don't know how many people died from AIDS. This study also revealed that 44% of students think that Pakistani people cannot get infected. The research showed that a very little information was recorded regarding various mitigation practices that should be adopted in order to stay away from HIV and AIDS.

Distressing gaps in knowledge relating to HIV and AIDS were identified. Increasing HIV knowledge regarding HIV status, stigma, fear, beliefs, social support, organizational capacity and certification courses in collaboration with governmental, non govt. Departments and organizations regarding HIV & AIDS.

**Keywords:** PLWHIV, HIV, AIDS, *Students' perception*;

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## Introduction

Assessing Perception and Knowledge regarding HIV and AIDS among adolescent and youth in high schools, colleges and universities has become of extreme importance and concern. Increased attempts are being made in order to generate superior understanding specifically in college students. It is because this age group has found to be more susceptible to this infection as compared to other age groups.<sup>1</sup>

Youth in Pakistan, especially studying in colleges and universities recently are in the news of being involved in increased usage of drugs. Various instances has also revealed rising positive cases of HIV in some of the educational institutes. These students often experience challenges such as risky handling of drugs, lack of information regarding protection methods and perilous sexual practices.<sup>2</sup> Thus leading to an increased risk of being infected, sufferers of sexual violence, exploitation and discrimination also making them more susceptible to STIs including HIV and AIDS. High-risk sexual behaviours are prevalent among male and female drug users in Pakistan, and awareness of transmission risks is also low.<sup>2,3</sup>

Moreover, these understudies to a further degree use medications and offer needles frequently ignorant, jobless and have unfortunate mindfulness about HIV and AIDS, which expands the gamble of everyone getting HIV and AIDS transmission.<sup>3</sup> The presence of various high-risk sexual ways of behaving, inside and outside the movement, elevated degree of infusing drug use, and chronic weakness and social administrations are a portion of the variables expanding the gamble of the HIV scourge in the country. Countless youngsters are residing in outrageous neediness; financial emergencies and broken homes. Physical and mental maltreatment expands their gamble of sexual double-dealing, perilous sexual practices, and furthermore contracting HIV and AIDS.<sup>4</sup>

Pakistan is not new to HIV & AIDS according to National AIDS Control Program (NACP) at least 1,029 mothers and 211 children are also among officially registered 7,100 HIV/AIDS patients who have contracted the deadly virus in Punjab.<sup>5</sup> National AIDS Control Program (NACP), Pakistan has registered 46,912 HIV cases who know their status, 0.24 Million estimated people with HIV, 7,264 People with injecting drugs (PWID) are on ARV Therapy, and 26,093 are receiving Antiretroviral Therapy (ART) in 50 ART centres till June 2021.

According to the UNAIDS report of Pakistan 2020, estimated adult and children living with HIV around 200,000, women aged 15 and over LHIV around 40,000, men aged 15 and above living with HIV around 160,000, children aged 0 to 14 LHIV around 4900, adult aged 15 to 49 HIV prevalence rate around 0.2%.

This is a very under estimated figure and is not near to complete representation of the infected people. It is recorded that lack of awareness about HIV and AIDS among the general population and health care professionals, the stigma attached with HIV/AIDS, lack of diagnostic testing facilities and the difficulties of making a diagnosis in children, especially in a country where malnutrition rates are as high as 30% among children under 5 years of age.<sup>6</sup>

The large population of young adults in the communities with high levels of close social contact might have the potential to become the focus of the epidemic. Knowledge is very useful tools prior to any intervention to assess the extent to which individuals or communities are in a position to adopt risk-free behaviours<sup>7</sup>.

The HIV and AIDS pandemic is steadily increasing in severity throughout the developing world. Recently, Southeast Asia has become a rising concern for health care professionals in the field of infectious disease.<sup>8</sup> Most of Southeast Asia is experiencing surging prevalence and incidence rates of HIV infection. One particular country of interest is Pakistan. The population of Pakistan has surpassed more than 227 million; Pakistan's large population exacerbates the problematic scenario of HIV prevalence rates that are increasing throughout the country and region<sup>9</sup>. Students in Pakistan lack knowledge about HIV and also have misconceptions about modalities of transmission, negative attitudes towards those who test positive for HIV. In order to decrease transmission rates among students, quality HIV and AIDS education must be implemented in a culturally relevant manner.<sup>10</sup>

Understanding of HIV & AIDS and its prevention must know information for the students of high school, colleges & universities, without it they cannot take appropriate steps to prevent the disease. There are many stakeholders of HIV field who have a pivotal role in which should have complete grasp about AIDS and its preventive measures. <sup>11</sup>The latest study was conducted to discover the understanding, general perception and response of educated youth about HIV and AIDS across school, college & universities and academic institutes of the South Punjab.

## Methods

The study was conducted during January 2020 to June 2020. This six months survey was a Descriptive and cross-sectional study which was comprised of mixed methods consisting of both qualitative and quantitative.

### Sample Composition and Size

The authors focused students in high schools, colleges and universities to determine the perception and knowledge regarding HIV & AIDS. Among the sample groups, 2 universities, 3 colleges and 4 high schools were selected. More or less 35 students from each institute were interviewed making a total sample size of 300 respondents.

### Data Collection and Instrument

Data was obtained using the structured and standardized questionnaire along with it focus group discussions, face to face interviews and observations were also held among students of different educational institutions. The consent forms were provided to the eligible participants with an overview of the objectives of the study, the confidential nature of the interview, the right of the participants to refuse to answer questions, as well as the right of subjects to end the interview at any time. The interviewees were briefed about the objective of the study and the confidentiality of the collected information. It was followed by face to face interviews.

### Data Analysis

Data entry was done through the excel spreadsheet and then analyzed through IBM SPSS 26. Descriptive analysis was carried out. On completion of the data entry errors for discrepancy of responses to related questions within questionnaires were checked again to further guarantee the quality of data. No personal information was accompanied these records.

## Results

### Demographic and socio-economic section (DEM)

The study included 300 respondents from the South Punjab educational institutions. It included the students of different schools, colleges & universities. The participants of this study were both males & females. The graph is showing 62.7% were male students whereas 37.3% were females (Table.1). In the study majority respondents were teenaged students (63.6%) present in colleges and in universities. The study displayed respondents that were living in the city for more than 10 years (57.6%) were more involved in this survey. The survey showed more presence of seraiki ethnic group. As the survey was conducted mostly in colleges and university students so most of the respondents that we received had education mostly of intermediate (45%) and bachelors (40%)

**HIV & AIDS Related Knowledge & Awareness (HKA)**

The results depicted that most of the students in the educational institute of this region had basic information and awareness regarding HIV/AIDS. It was seen that about 79% of the students in their life had heard of HIV/AIDS having somewhat basic information about the disease (Fig1). This current study demonstrated, the majority (75%) of the students have understanding about the word HIV (Fig 2). They had definite understanding about the meaning of HIV virus.

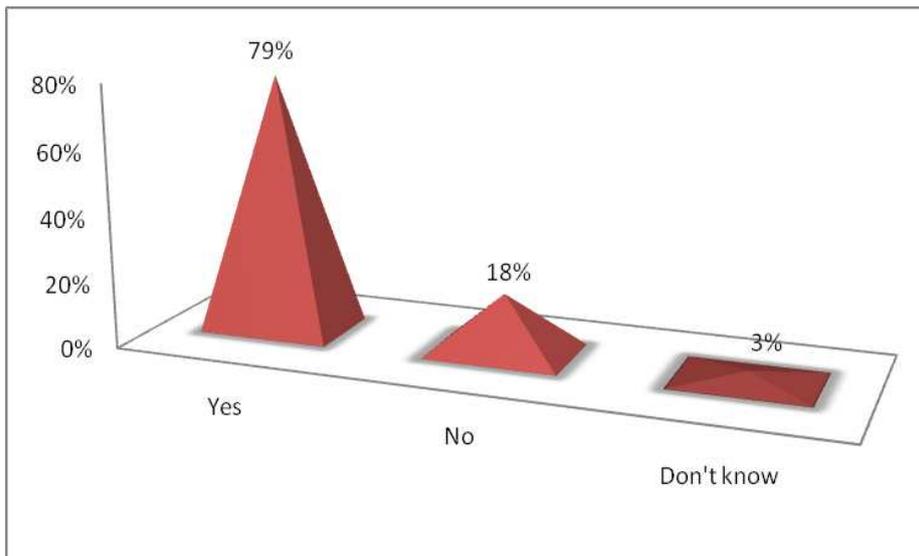
Similar to the word HIV, most students (77%) had basic understanding about the word AIDS (Fig 3). This study described of the fact that the students did not have exact knowledge about the virus and the disease and having very basic awareness about it. When asked about the source of the awareness regarding HIV/AIDS, most of the students (65%) had this information from the print and social media. There were very few instances when any student (29%) had this knowledge from a health worker (Fig 4). So in order to verify this perception we asked the students that if Pakistanis were prone to get HIV/AIDS, Most of the students (44%) had a view that as this is just like any other disease and it will spread equally. While still 39% of the respondents perceived that Pakistanis and specifically Muslims were immune to this disease (Fig 5).

In this (Fig. 6) shows that most of the students have mixed feelings and everybody has the different answers regarding HIV cannot be transmitted. The study included modes of transmission of HIV/AIDS. It was depicted that the students had basic awareness regarding modes of transmission of this disease. While only 3% were those that did not know about transmission modes of HIV. The major proportion (45%) of people was of the perception that most of the HIV infections spread through unsafe sexual intercourse with the infected person (Fig 7). While few people thought that it spreads from needles, transfusion of blood and blood products. This result shows that there is only a basic information and knowledge of transmission and modes of HIV. Most of the students (56%) did not know any statistics regarding deaths from AIDS neither nationally or internationally (Fig 8). In Fig 9 most of the students don't know exactly that how many people living with HIV and AIDS in Pakistan. When asked about the most killer and dangerous disease according to their knowledge most of the students did believe that AIDS could be the most dangerous, but most of the respondents also believed that cancer and heart disease are equally dangerous (Fig10).

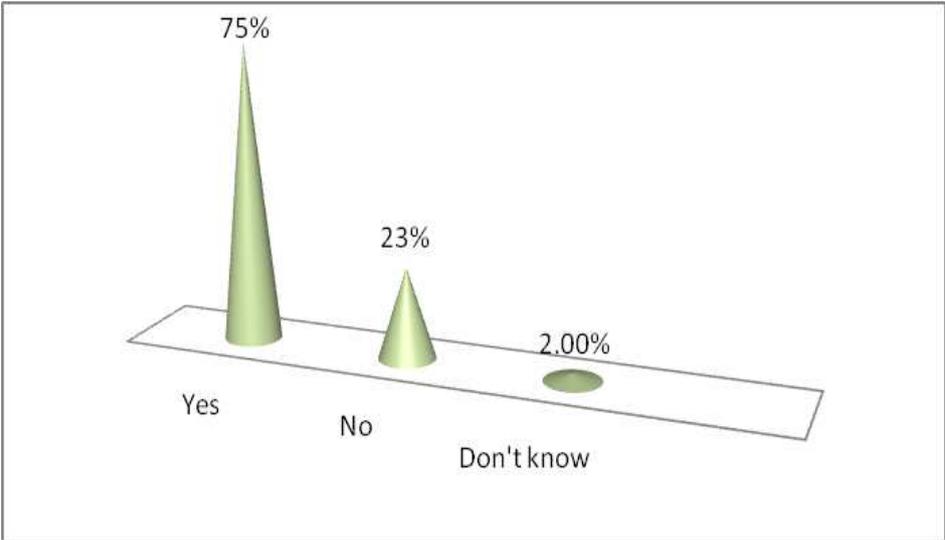
**Table 1: Background information of the respondents**

1. Variables	2. Categories	3. Percentage
4. Gender	5. Male	6. 62.7
	7. Female	8. 37.3
9. Age	10. Old	11. 2.5
	12. Middle aged	13. 8.3
	14. Young	15. 25.6
	16. Teenaged	17. 63.6
18. Duration of stay in the city	19. <1 year	23. 5.3
	20. 1-5 years	24. 19.5
	21. 6-10 years	25. 17.6
	22. >10 years	26. 57.6
27. Ethnic Group	28. Punjabi	34. 36.4
	29. Pashtuns	35. 3
	30. Sindhi	36. 2.5
	31. Seraiki	37. 52.6
	32. Muhajir	38. 5
	33. Baluch	39. 0.5
40. Education	41. Matric	45. 5
	42. Intermediate	46. 45
	43. Bachelors	47. 40
	44. Masters	48. 10

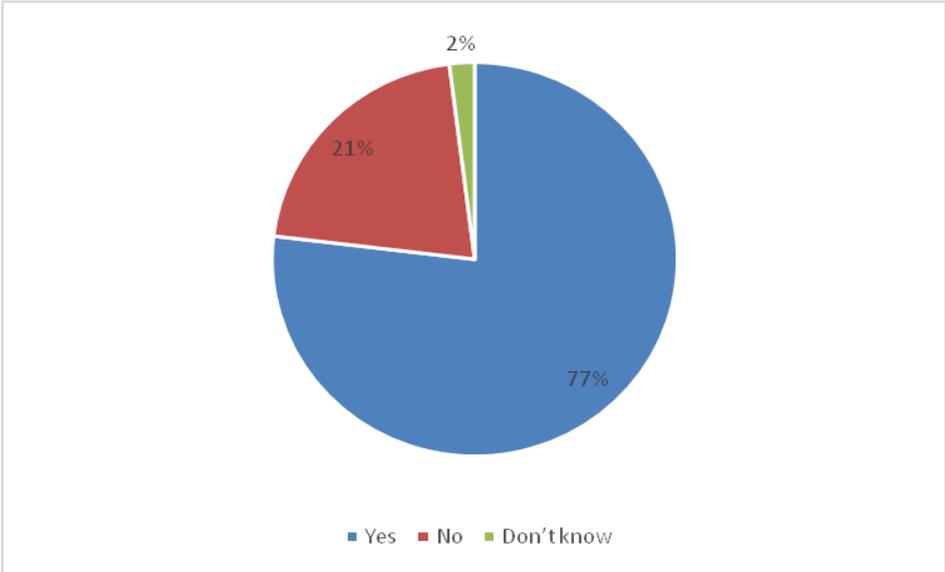
**Fig.1 ever heard of HIV & AIDS**



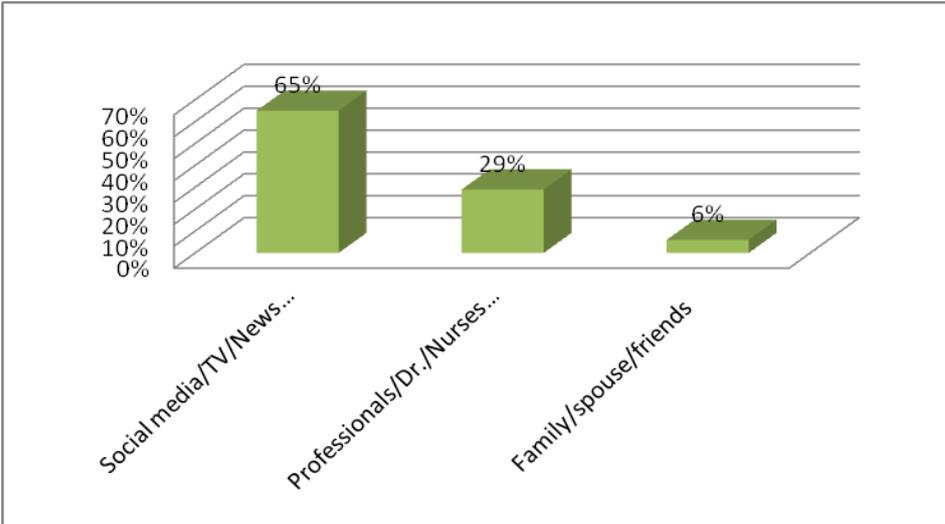
**Fig.2 Understanding the word about HIV**



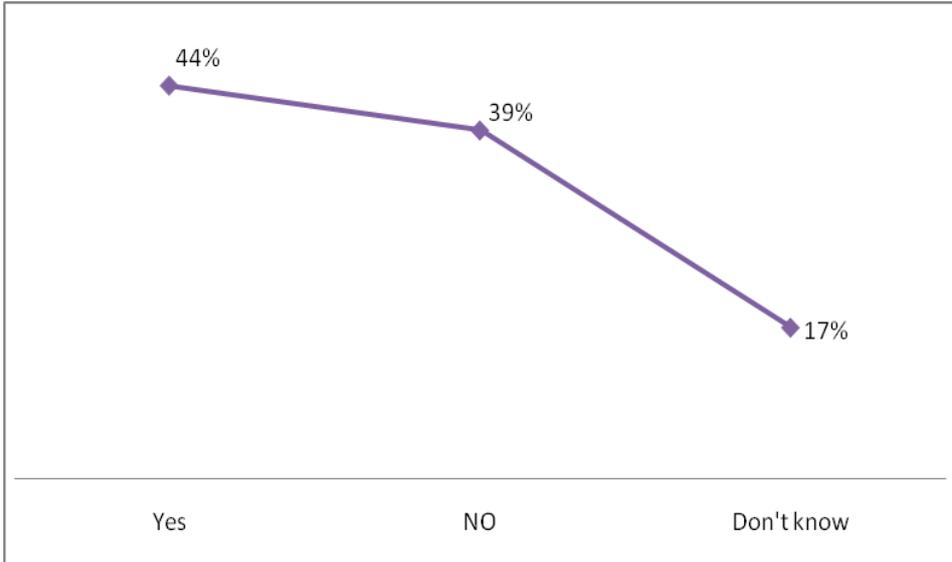
**Fig. 3 Meaning of AIDS**



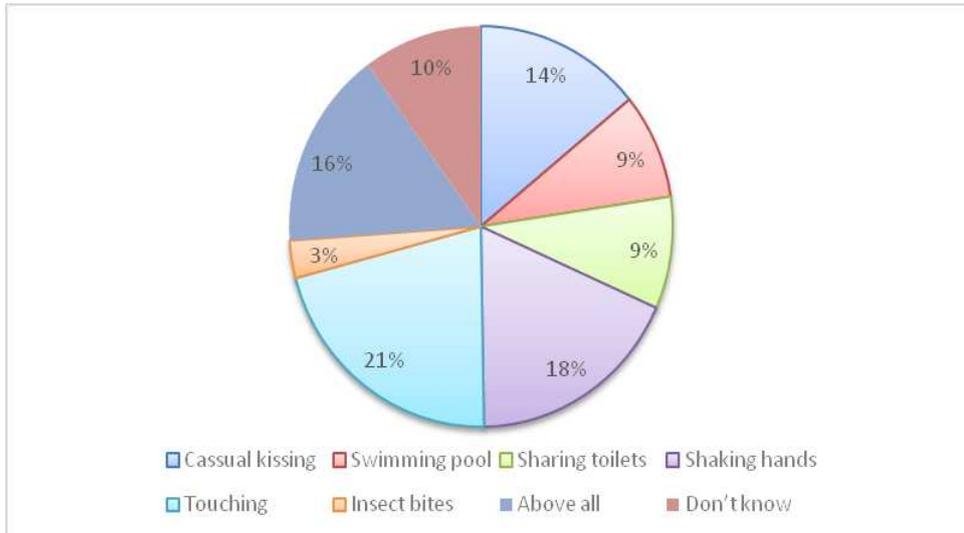
**Fig. 4 Source of hearing HIV & AIDS**



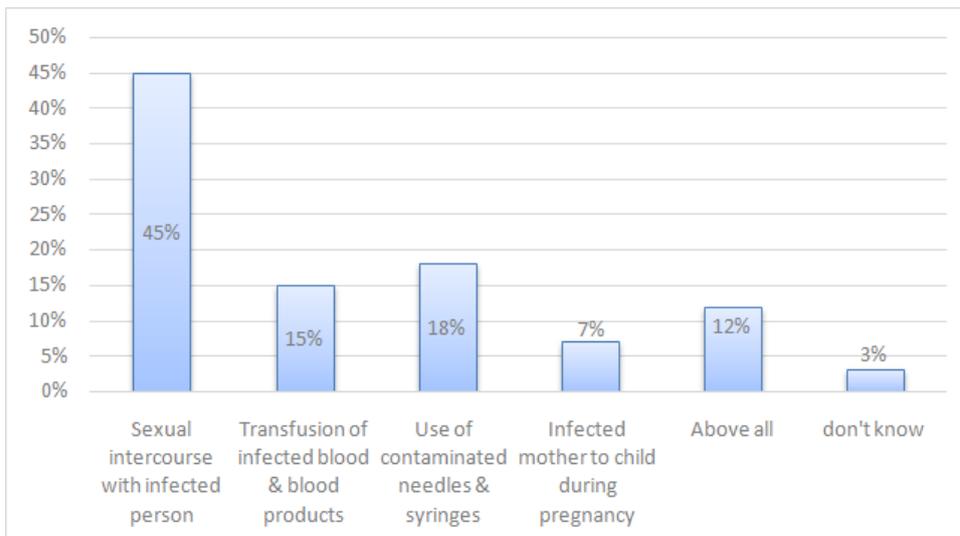
**Fig. 5 Are Pakistani people get infected**



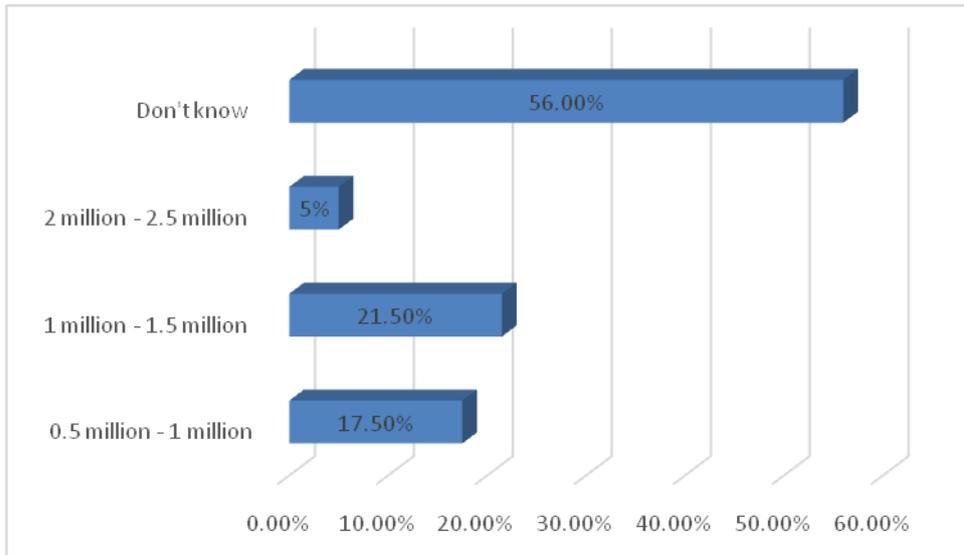
**Fig. 6 How HIV cannot be transmitted**



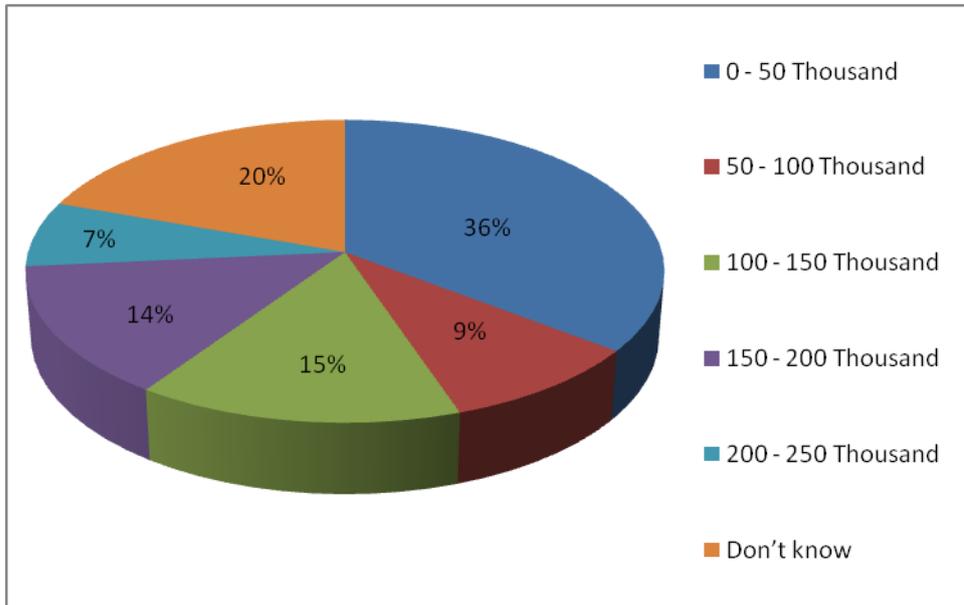
**Fig. 7 what modes of transmission of HIV**



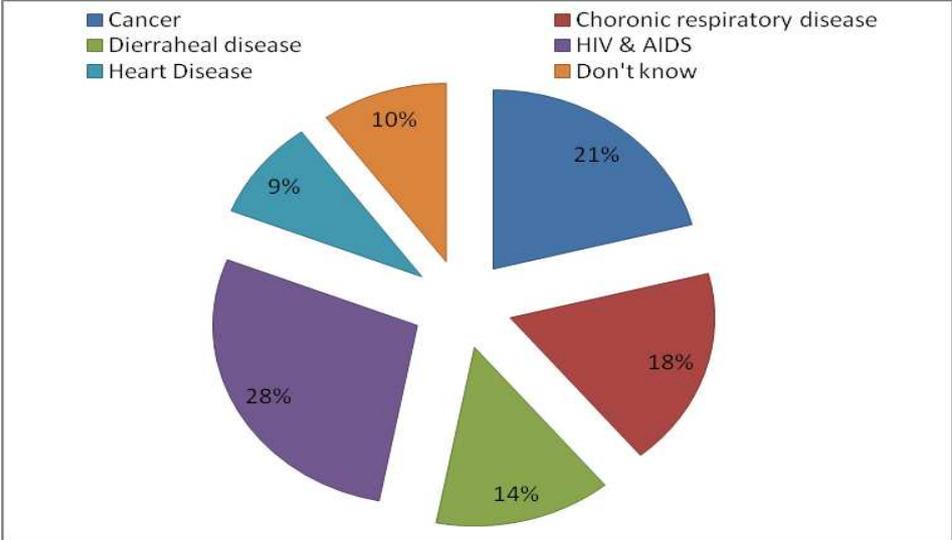
**Fig. 8** people died from AIDS in 2014



**Fig. 9** Number of people are living with HIV & AIDS in Pakistan



**Fig. 10 The most killer disease**



## Discussion

Authors carried out this survey to find out the perception, knowledge and understanding of HIV and AIDS among young students in schools and colleges. First of all a trend related to gender was observed showing majority participation of male students. It was due to the fact that female students in this culture feel awkward to answer on such questions. Researches on similar topics in South East Asia specifically in the subcontinent have observed dominance in male respondents and a very low proportion of female respondents<sup>11</sup>. In the study majority respondents were teenaged students (63.6%) present in colleges and in universities. It can be explained by a fact that most of the students at this early stage are more prone to get in to drugs and addiction.<sup>12</sup>The survey showed more presence of seraiki ethnic group. It is due to the fact that South Punjab region has the more population of seraiki people<sup>14</sup>. It was observed that the students in this region had only a basic knowledge of HIV/AIDS.

It has been seen in this study that very limited information related to basic definition, symptoms and causes was reported by the students. Similar studies regarding drug use reported most of the pupils in schools and colleges only to have basic knowledge about drugs but not the disease and associated symptoms and causes<sup>13,15</sup>. Another fact explaining less information of basic knowledge of HIV/AIDS is that most children in their teenage are unaware of the consequences and related diseases that could be contracted to them<sup>14-15</sup>. These results are in accordance with a similar finding reported in the educational institutes of Bangladesh<sup>14</sup>.

It was found that somewhat understanding and information of HIV among the students came from the Social media. It is justified by studies endorsing the increase in use of social media use among the new generation. They argue that social media has a tendency to build the perception of most young children on the frequency of their use<sup>13, 15</sup>. The main result or response the current study generated is that Muslims have a very low chance of getting contracted to HIV/AIDS<sup>15-16</sup>. Such responses are also available in few of the studies that are more prominent in a Muslim culture<sup>17-18</sup>. This thought process is related to religious beliefs and often bias and naive teaching taught by the religious scholars in the country.<sup>19</sup>This result shows that there is only a basic information and knowledge of transmission mode of HIV. Similar results have also been reported in similar studies that have shown sexual intercourse perceived as the main transmission agent.<sup>19, 20</sup> These outcomes are inverse to a portion of the South Asian nations where studies have demonstrated that individuals adored AIDS to be the most hazardous executioner.<sup>21,22</sup>

## Conclusion

The upsetting cracks in knowledge relating to HIV and AIDS were discovered. This study emphasizes the need to educate students, young adults and equip them with the appropriate information and skills to enable them to protect themselves from HIV/AIDS. However, taboos surrounding public discussions of sexuality remain a key constraint to preventive activities.

Diminishing the worldwide weight of sickness is conceivable through general wellbeing drives and intercessions to forestall transmission. Quite possibly the best method for forestalling transmission is to zero in on Awareness and Prevention programs at all levels. If we can enhance the knowledge about HIV for both males & females, knowledge about HIV status, stigma, fear and beliefs, interpersonal involvement of males, social support, organizational capacity for staff, proper training & certification courses for students, continuing education about HIV & AIDS with educational departments then we can surely decreased or eliminated HIV among us & our youth would not have to live and suffer with HIV/AIDS from birth, major HIV-related national security issues could be averted, and Pakistan could decrease its national burden of HIV/AIDS. It was additionally observed that the gamble factor profile varied fairly between the male and the female understudies. These distinctions are because of ladies and men carrying on with various lives in Pakistan, basically because of orientation differences. This is explicitly obvious concerning admittance to schooling.

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## References

1. Ali, W., Fani, M. I., Afzal, S., &Yasin, G. (2010). Cultural barriers in women empowerment: a sociological analysis of Multan, Pakistan. *European Journal of Social Sciences*, 18(1), 147-155.
2. Holloway, K., & Bennett, T. (2012). Prescription drug misuse among university staff and students: A survey of motives, nature and extent. *Drugs: education, prevention and policy*, 19(2), 137-144.
3. Castaldelli-Maia, J. M., Martins, S. S., De Oliveira, L. G., Van Laar, M., De Andrade, A. G., &Nicastri, S. (2014). Use transition between illegal drugs among Brazilian university students. *Social psychiatry and psychiatric epidemiology*, 49(3), 385-394.
4. Shahzad, A. (2019). Issues of Ethnic Diversity and Just Development in Pakistan with a Special Focus on the Seraiki Ethnic Group. *Pakistan Perspectives*, 24(1).
5. Gupta, P., Anjum, F., Bhardwaj, P., Srivastav, J. P., &Zaidi, Z. H. (2013). Knowledge about HIV/AIDS among secondary school students. *North American journal of medical sciences*, 5(2), 119.
6. Platten, M., Pham, H. N., & Nguyen, H. V. (2014). Knowledge of HIV and factors associated with attitudes towards HIV among final-year medical students at Hanoi medical university in Vietnam. *BMC public health*, 14(1), 1-8.
7. Lelutiu-Weinberger, C., Pachankis, J. E., Gamarel, K. E., Surace, A., Golub, S. A., & Parsons, J. T. (2015). Feasibility, acceptability, and preliminary efficacy of a live-chat social media intervention to reduce HIV risk among young men who have sex with men. *AIDS and Behavior*, 19(7), 1214-1227.
8. Gray, P. B. (2004). HIV and Islam: is HIV prevalence lower among Muslims?. *Social science & medicine*, 58(9), 1751-1756.
9. Balogun, A. S. (2010). Islamic perspectives on HIV/AIDS and antiretroviral treatment: the case of Nigeria. *African Journal of AIDS research*, 9(4), 459-466.
10. Sharma, U. K., Schreiber, G. B., Glynn, S. A., Nass, C. C., Higgins, M. J., Tu, Y., ... & Retrovirus Epidemiology Donor Study. (2001). Knowledge of HIV/AIDS transmission and screening in United States blood donors. *Transfusion*, 41(11), 1341-1350.
11. Yaya, S., Bishwajit, G., Danhouno, G., &Seydou, I. (2016). Extent of knowledge about HIV and its determinants among men in Bangladesh. *Frontiers in public health*, 4, 246.
12. Lema, L. A., Katapa, R. S., & Musa, A. S. (2008). Knowledge on HIV/AIDS and sexual behaviour among youths in Kibaha District, Tanzania. *Tanzania journal of health research*, 10(2), 79-83.
13. Wang, P., Zhang, Y. J., Pan, X. J., Xia, X. Y., &Lv, S. Y. (2014). Survey of attitude and knowledge of reproductive health among middle school students in Luoyang, China. *Genetics and Molecular Research*, 13(3), 6168-6176.
14. Shinde, M., Trivedi, A., Shinde, A., & Mishra, S. K. (2017). A study of awareness regarding HIV/AIDS among secondary school students. *International Journal Of Community Medicine And Public Health*, 3(6), 1461-1465.
15. Sun, X., Fan, L., Chang, C., & Shi, Y. (2020). HIV/AIDS related perception and behavior: A comparative study among college students of different majors in China. *International journal of nursing sciences*, 7, S74-S79.
16. Batra, S., Memon, Z. A., Ochani, R. K., Awan, S., Bhimani, S., Siddiqui, Y., ...&Farooqi, H. A. (2020). Knowledge, attitude and practice of medical students towards HIV patients in their pre-clinical and post-clinical years in Karachi, Pakistan: a dual-center cross-sectional study. *Le Infezioni in Medicina*, 28(2), 231-237.

17. Mumtaz, G. R., Hilmi, N., Majed, E. Z., & Abu-Raddad, L. J. (2020). Characterising HIV/AIDS knowledge and attitudes in the Middle East and North Africa: systematic review and data synthesis. *Global public health*, 15(2), 275-298.
18. Shankar, P. R., Subish, P., Paudel, R., & Alam, K. (2009). Perception and knowledge about HIV/AIDS among students in a medical college in Western Nepal. *SAARC Journal of Tuberculosis, Lung Diseases and HIV/AIDS*, 6(2), 11-16.
19. Abrar, N., & Ghouri, A. M. (2010). AIDS/HIV Knowledge, Attitude and beliefs of Adolescents of Pakistan. *European Journal of Social Sciences*, 16(2), 275-285.
20. Iqbal, S., Maqsood, S., Zafar, A., Zakar, R., Zakar, M. Z., & Fischer, F. (2019). Determinants of overall knowledge of and attitudes towards HIV/AIDS transmission among ever-married women in Pakistan: evidence from the Demographic and Health Survey 2012–13. *BMC public health*, 19(1), 1-14.
21. Nasir, J. A., Imran, M., & Zaidi, S. A. A. (2015). HIV/AIDS AWARENESS IN PAKISTAN. *The Professional Medical Journal*, 22(05), 603-609.
22. Ilyas, M., Asad, S., Ali, L., Shah, M., Badar, S., Sarwar, M. T., & Sumrin, A. (2011). A situational analysis of HIV and AIDS in Pakistan. *Virology journal*, 8(1), 1-3.