

HIV/AIDS Related Knowledge, Attitude, Risk Perception And Sexual Behavior Among College Students

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Abstract: This study determined the HIV/AIDS related knowledge, attitude towards person living with HIV/AIDS, risk perception and sexual behavior among college students. There are three designs involved in this study. A descriptive research design which described the demographic profile, related knowledge of HIV/AIDS, attitude towards person living with HIV/AIDS, risks perception and sexual behavior. A correlational design was also utilized to determine the relationship between knowledge to their attitude. Developmental design was used for the development of HIV/AIDS awareness and prevention program. Findings of the study revealed that HIV/AIDS knowledge in mode of transmission obtained a percentage of 57.75 with moderate level of knowledge, while prevention garnered a percent rating of 47.18 with fair level of knowledge. In terms of attitude of students, data revealed a grand mean of 3.33 with fair level of avoidance while empathy obtained an overall mean of 4.65 with high level of empathy. In addition, there was significant relationship between the knowledge of mode of transmission to empathetic attitude while knowledge of prevention to empathetic attitude, knowledge of prevention to avoidance and knowledge of mode of transmission to avoidance, showed no significant relationship. In the level of students' risk perception of contracting HIV/AIDS, data revealed 0.63% showed a high perceived risk while low perceived risk consist of 42.09% and no risk comprised of 50.00%. In the level of students' sexual risk behavior, results demonstrated 2.22% of students are considered to have high risk level of behavior, while 7.59% had moderate risk and 37.97% had low risk. Thus, based on its significant findings, HIV/AIDS program was developed.

Keywords: HIV/AIDS related Knowledge; Attitude towards PLWHA; Risk Perception; Sexual Behavior of College Students

1. Introduction

The first case of HIV infection in the Philippines was reported in 1984. From January 1984 to March 2016, there has been an increase to 32,647 HIV cases. The age group with the biggest proportion of cases has become younger wherein proportion of HIV cases in the 15-24 year age group rise from 25% in 2006-2010 to 28% in 2011-2016 [1]. According to Dr. Mely Lastimoso, chief of the City Health Office's (CHO) Epidemiology and Surveillance Unit in Gen. Santos City, number of confirmed HIV/AIDS cases in the city has already reached 416 as of March 2017. Most of the cases belong to the age range of 16 to 25 years old. To address this problem, the Local Government Unit focuses their services on free HIV Testing for vulnerable groups and free antiretroviral treatment for confirmed cases. Most of their services were centered on halting the spread of HIV/AIDS through providing medications and imparting health teachings on medication compliance. However, there is no HIV/AIDS education program implemented locally. As stated by the World Health Organization (WHO) and the Joint United Nations Program on HIV/AIDS as mentioned [2] young people are at risk to HIV infection as a result of a lack of correct health information, indulgence in risky behaviors, and lack of access to adequate reproductive health services. In addition, while knowledge about HIV may be adequate, people usually do not feel motivated to modify their behavior unless they sense they are personally at risk of infection [3]. An individual's perception of the risk of acquiring HIV is a critical determinant of sexual behavior [4]. Moreover, the Guidance and Testing Center of Notre Dame of Dadiangas University, whose activities are centered on assisting all types of clientele to realize their full potentials and achieve optimum growth and development consistent with the institutional goal and objectives, have created an AIDS Awareness embedded in the Personal

Growth Session (PGS) designed for the students to learn of HIV/AIDS. Symposium was conducted wherein invited speaker talked about HIV/AIDS prevention. World AIDS Day was also carried out every year to show support for people living with HIV and be united in the fight against HIV/AIDS. Likewise school clinic raise awareness on HIV/AIDS through poster pasted in their bulletin board. However, college students may show knowledge about HIV/AIDS, but still number of individuals who attend a higher institution of learning who are at risk for HIV has substantially increased. College students often participate in risky behaviors that include unprotected sexual activities and sexual contact with multiple partners. While they may have general knowledge of HIV/AIDS, there is still a need for a comprehensive education about important concepts related to HIV/AIDS [5]. HIV has come out as the significant public health concern particularly on the younger population because of their greater risk of acquiring infection due to changing behavior pattern. Young people need information to equip them in order to make choices and assessing their knowledge would be essential in the prevention of HIV infection. With this information, the researcher is motivated to assess the related knowledge, attitude towards HIV/AIDS, risk perception and sexual behavior of college students, and develop an HIV/AIDS Advocacy program, thus this study is conducted.

Objectives of the Study

This study aimed to determine the knowledge and attitude towards HIV/AIDS, risk perception and sexual behavior among college students. Specifically, this study did the following: determined the profile of college students; determined the level of HIV/AIDS knowledge of college students; assessed the respondents' attitude towards persons with HIV/AIDS; determined the relationship between the

students' knowledge and their attitude towards persons with HIV/AIDS; determined the student-respondents' sexual behavior and perceived risk; developed HIV/AIDS awareness and prevention program; and determined the extent of validity of HIV/AIDS awareness and prevention program.

2. Method

2.1 Research Design

There are three designs involved in this study: A descriptive research design which described the demographic profile of college students and their related knowledge of HIV/AIDS, their attitude towards person living with HIV/AIDS, risks perception and sexual behavior; A correlational design was utilized to assess the relationship between knowledge to their attitude. Developmental design was used for the development of HIV/AIDS awareness and prevention program which was based on the results of the study.

2.2 Locale of the Study

This study was conducted at Notre Dame of Dadiangas University (NDDU) General Santos City, Philippines. NDDU is a Catholic, Filipino Institution of Academic Excellence established by the Marist Brothers.

2.3 Respondents of the Study

The respondents were 316 students enrolled in summer classes of school year 2016-2017. This was determined through the total number of enrollees obtained from registrar's office. They were chosen as respondents because they belong to the age group of 18-25 years old, in which in this stage, student showed more independence from their parents, give more importance on peer group, engaged in an intimate relationship and more risk-taking behaviors.

2.4 Research Instrument

The instruments used in this study are the following: demographic questionnaire that include the age, sex, year level and course taken, HIV knowledge questionnaire (HIV-KQ-18), AIDS Attitude Scale (AAS), risk perception and sexual behavior questionnaire. The HIV knowledge questionnaire (HIV-KQ-18) formulated by Carey and Schroder (2002) was used to assess the knowledge of HIV transmission. It consists of an 18 item, self-administered questionnaire, with "true", "false", or "don't know" statements. High score would indicate high level of knowledge and on the contrary low score on the HIV-KQ-18 would imply a low general knowledge of HIV/AIDS [6]. The second instrument measures the attitude of students towards a person living with HIV/AIDS (PLWHA). The AIDS Attitude Scale (AAS) [7] was a self-report measure of attitude toward persons with AIDS and was first formulated to determine the attitudes of health professionals towards HIV/AIDS. However, it was also proposed for use with different population. This is made up of 21 item scale which measures two subscales of empathy and avoidance regarding HIV/AIDS. The third instrument was self-administered questionnaire that measured the risk perception and sexual behavior formulated by [8]. This was developed after a review of literatures about perceived risk for contracting HIV among adolescents.

2.5 Sampling Technique

In this study, convenient sampling was used. Students enrolled in summer classes and readily available during the data gathering process were utilized. In addition, to determine the sample size of the population, Slovin's formula was employed. The total sample was drawn from the 1504 college students enrolled for summer classes for school year 2016-2017. The final sample was 316 students.

2.6 Research Procedure

In the conduct of the study, the researcher sought approval of the schools' board in a letter addressed to the President of Notre Dame of Dadiangas University. This was followed by getting permission from the deans where the data be collected. Permission was also taken from the teachers during the data collection. During data collection, consent was obtained from the respondents. Names were not written in the questionnaire for the purpose of anonymity. The respondents were informed that their participation was voluntary and that they were not required to sign or fill the form. It was also reiterated of the right of every participant to withdraw at any time while completing the questionnaires. They were assured that their responses will be treated confidentially. The researcher briefed the students on the general purpose and significance of the study. Likewise, instruction on how to fill the forms was given. The self-administered questionnaire was distributed to the selected respondents and was collected after they had finished answering the questionnaire.

2.7 Statistical Tool

The statistical tools used in this study were frequency and percentage which is used to determine the demographic profile of the respondents. To assess their level of knowledge regarding HIV/AIDS, attitude towards person living with HIV/AIDS, risk perception and sexual behavior, frequency, percentage, and mean were utilized. To measure the significant relationship between knowledge to their attitude Chi-Square was used in this study. The Chi-Square test of Independence is used to determine if there is a significant relationship or association between two categorical variables from a single population. Its degrees of freedom is $df = (r - 1)(c - 1)$ where r is the number of levels for one categorical variable, and c is the number of levels for the other categorical variable.

3. Results

3.1 Profile of College Students

Table 1 presents the demographic profile of college students in terms of age at the time of survey, gender, year level and course taken. Data revealed that the age bracket of 18 -19 got the highest percentage of 86.08 while the lowest was the age bracket of 22 and above which obtained 1.58 %. In addition in terms of gender, results revealed that females comprised of 67.41% while males comprised only of 32.59 percent. The data in the year level showed that 64.87% of students were in their 2nd year while 3.48% consist of 4th year students and 31.01% in their 3rd level. Furthermore, in terms of courses taken by the respondents, BSMT obtained the highest percentage of 25.00%, while the lowest comprised of BEED, BLIS and BSCE with a percentage of 0.32.

Table 1: Profile of College Students (n = 316)

Demographic Profile	Number of Students	Percentage
Age: 18 – 19	272	86.08
20 – 21	39	12.34
22 and above	5	1.58
Sex : Male	103	32.59
Female	213	67.41
Year Level : Second	205	64.87
Third	98	31.01
Fourth	11	3.48
Course: AB-ENGL	4	1.27
AB-POLSCI	12	3.80
BEED	1	0.32
BLIS	1	0.32
BSA	43	13.61
BSARCH	14	4.43
BSAT	15	4.75
BSBA	33	10.44
BSBIO	2	0.63
BSCE	1	0.32
BSCS	7	2.22
BSE	44	13.92
BSIE	8	2.53
BSIT	22	6.96
BSMT	79	25.00
BSN	30	9.49

3.2 Students’ Level of Knowledge

Table 2 presents the summary of students’ level of knowledge of HIV/AIDS concept. Data showed that mode of transmission obtained a percentage of 57.75 with an interpretation of moderate level, while prevention garnered a percent rating of 47.18 with a fair level interpretation.

Table 2: Students’ Level of Knowledge (n=316)

Indicators	Percent Rating	Interpretation
Mode of Transmission	57.75	Moderate
Prevention	47.18	Fair

3.3 Students’ Attitude towards Person with HIV/AIDS

Presented in table 3 is the attitude of students in terms of avoidance and empathy towards person with HIV/AIDS. The overall mean obtained is 3.33 with fair level of avoidance. Data also showed an overall mean of 4.65 with an interpretation of high level of empathy. This indicates that students show more acceptable attitude or behavior towards person living with HIV/AIDS. Results also suggested that students acquired compassion and empathy towards those people infected with HIV and did not judge them in a negative way.

Table 3: Students’ Attitude towards Person with HIV/AIDS (n =316)

Indicators	Overall Mean	Interpretation
Avoidance	3.33	Fair
Empathy	4.65	High

3.4 Test of Significance of Relationship between the Level of Students’ Knowledge and their Attitude towards Person with AIDS

A chi-square test of independence was performed to examine the relationship between level of students’ knowledge about HIV/AIDS and their attitude towards person with AIDS. Specifically, the relationship between knowledge about mode of transmission and empathetic attitude towards person with AIDS was significant, $\chi^2(15, n = 316) = 31.663, p < 0.05$. Further analysis indicated significant relationship between knowledge on mode of transmission and empathetic attitude towards person with AIDS. Moreover, the relationship between knowledge about mode of transmission and avoidance attitude $\chi^2(9, n = 316) = 6.448, p > 0.05$, knowledge of prevention and empathetic attitude $\chi^2(10, n = 316) = 12.326, p > 0.05$, knowledge of prevention and avoidance attitude $\chi^2(6, n = 316) = 3.015, p > 0.05$ towards person with AIDS were all not significant.

Table 4: Test of Significance of Relationship

Knowledge	Empathy			
	χ^2 - value	df	p - value	Interpretation
Mode of Transmission	31.663*	15	0.007	Significant
Prevention	12.326	10	0.264	Not Significant
Mode of Transmission	Avoidance			
	6.448	9	0.694	Not Significant
Prevention	3.015	6	0.807	Not Significant

Legend: * - significant, $p > 0.05$

3.5 Students’ Risk Perception of Contracting HIV/AIDS

The level of students’ risk perception of contracting HIV/AIDS is shown in table 5. Data revealed that 0.63% showed a high perceived risk while low perceived risk consist of 42.09% and no risk comprised of 50.00%. Half of the students perceived themselves to have no risk of contracting the disease.

Table 5: Level of Students Risk Perception of Contracting HIV/AIDS (n =316)

Number of Students	Percentage	Risk Perception Level
0	0.00	Very High Risk
2	0.63	High Risk
23	7.28	Moderate Risk
133	42.09	Low Risk
158	50.00	No Risk
TOTAL	316	100.00

3.6 Students' Sexual Behavior of Contracting HIV/AIDS

The level of students' risk sexual behavior of contracting HIV/AIDS is shown in table 6. It has been demonstrated that 2.22% of students were considered to have high risk level of behavior, while 7.59% had moderate risk and 37.97% had low risk.

Table 6: Students' Sexual Behavior of Contracting HIV/AIDS (n =316)

Number of Students	Percentage	Risk Sexual Behaviour Level
0	0.00	Very High Risk
7	2.22	High Risk
24	7.59	Moderate Risk
120	37.97	Low Risk
165	52.22	No Risk
TOTAL	316	100.00

3.7 Overall Mean Ratings of HIV/AIDS Prevention Program

Table 7 presents the overall mean rating on the adequacy, appropriateness, comprehensiveness and usability. The highest mean rating of 4.46 is provided on the comprehensiveness while adequacy of the material garnered a mean of 4.42. On the other hand appropriateness of the program obtained a rate of 4.25, and its usability garnered a rate of 4.25 which was the lowest rate. The overall mean obtained by the HIV/AIDS awareness and prevention program of this study is 4.34, which implied that the proposed program has met the maximum requirement of what a program should be and the standards of validation had been interpreted as Agree.

Table 7: Overall Mean Ratings of HIV/AIDS Prevention Program

Indicators	Weighted Mean	Extent of Agreement
1.Adequacy	4.42	Agree
2.Appropriateness	4.25	Agree
3. Comprehensiveness	4.46	Agree
4. Usability	4.25	Agree
Overall Mean	4.34	Agree

3.8 Development of HIV/AIDS Awareness and Prevention Program

The development of the proposed program was based on the results of this study. For each topic, specific objectives were made. The instructional strategies or student activities were appropriately done to make sure that the facilitator can utilize it. Evaluation was also included to determine the students' learning progress.

4. Conclusion and Recommendation

4.1 Conclusion

Based on the findings of the study, the researcher has drawn the conclusions that the level of students' knowledge in terms of mode of transmission demonstrated adequate understanding of concepts while in terms of prevention,

students demonstrated partial understanding with misconception of concepts related to HIV/AIDS. In addition, in terms of their attitude towards person living with HIV/AIDS, it signifies that majority of students showed less acceptable attitude which suggest that NDDU core values particularly presence and participation and preference for the least favored must be strengthen or reinforce however, there are a number of students who also showed high level empathy towards person with HIV/AIDS. Furthermore, perception of risk revealed that most students perceived a low risk of contracting HIV while risky sexual behavior includes early sexual debut which has been associated with HIV-related risk factors like multiple partners, unprotected sex and alcohol use in the context of sexual intercourse.

4.2 Recommendation

The study recommends that:

- There is a need to adapt HIV/AIDS awareness and prevention program to the existing programs in the university.
- There is a need to implement the HIV/AIDS awareness and prevention program to college students to strengthen different skills, develop positive attitude and good practice.
- There is a need to use the same research tool in the evaluation of the proposed program.
- There is a need to facilitate mainstreaming of HIV/AIDS awareness and prevention program into the curricula, research, and community service.
- Further researches should be conducted to evaluate the implementation of the HIV/AIDS awareness and prevention program.

References

- [1] HIV/AIDS & ART Registry of the Philippines (HARP). 2016.
- [2] Chen PF. "HIV/AIDS prevention among young people in East and South-East Asia in the context of reproductive and sexual health" *Asia-Pacific Population Journal*. 2008 Apr; 23(1):7-28.
- [3] Njogu W; Martin TC "The Persisting Gap between HIV/AIDS Knowledge and Risk prevention among Kenyan Youth". *Genus*. 2006 Apr-Jun; 62(2):135-168.
- [4] Anderson, K.; Beutel, A; Maughan-Brown, B "HIV/AIDS Risk Perceptions and First Sexual Intercourse Among Youth In Cape Town, South Africa" *International Family Planning Perspective* 2007 Sep; 33(3):98-105.
- [5] Shepperson, J; Brown, CW "Assessing the Knowledge of HIV/AIDS among African American College Student" 2007.PDF
- [6] Carey MP; Schroder KE "Development and Psychometric Evaluation of the Brief HIV Knowledge Questionnaire" *AIDS Education and Prevention*. 2002 Apr; 14(2):172-82.
- [7] Froman RD; Owen SV; Daisy C. "Development of a Measure of Attitudes towards Person with AIDS" *Journal of Nursing Scholarship*. 1992 Summer; 24(2):149-52.

- [8] Osingada, C., Nabasirye, C; Groves, S; Ngabirano, T.
“Perceived Risk of HIV Infection and Associated
Factors among Secondary School Students in Wakiso
District, Uganda” *Advances in Public Health*
Volume 2016, Article ID 9864727, 7 pages

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