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INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/10671
DOI URL: <http://dx.doi.org/10.21474/IJAR01/10671>



RESEARCH ARTICLE

KNOWLEDGE AND BEHAVIOR TOWARDS HIV/AIDS AMONG YOUNG ADULTS

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Manuscript Info

Manuscript History

Received: 15 January 2020

Final Accepted: 17 February 2020

Published: March 2020

Key words:-

HIV/AIDS, Young Adults, Tertiary
Schools, Knowledge, Behavior, Self-
Efficacy

Abstract

Studies worldwide has reported that HIV/AIDS remains a prominent health issue concerning adolescent sexual behaviors. Literature shows that early initiators of sex are less knowledgeable and inexperienced, some have adequate knowledge but risky sexual practices still continue to flourish despite adequate campaign on its prevention, it still fails to translate into practice. The study aimed to to evaluate the degree of knowledge and behavior of tertiary school students towards HIV/AIDS. Moreover, it was conducted due to the behavior and practices of youths who are engaging in risky sexual behaviors without any protection, lack of basic knowledge, and the reluctance of adults in discussing reproductive health. The Health Belief and Health Promotion Model was provided as frameworks. Simple stratified random sampling recruited five hundred (500) students ages 15-24 from different tertiary schools of Ormoc City, Leyte. Data were collected using 39-item researcher structured questionnaire where 21 questions intended to measure their degree of knowledge and 18 were intended to measure the degree of behavior. A descriptive statistics forged the analysis and interpretation of the results. The findings revealed that despite the respondent's level of knowledge (3.19) and behavior (2.96) towards HIV/AIDS, some 34.2% young adults still continue to harbor myths and misconception like mosquitoes are the most common vector of the infection. It is recommended that sustainable comprehensive education on the benefits of having comprehensive knowledge about the infection be put in place. Moreover, it is recommended to establish meaningful health strategies so that the young adults develop their competence and ability to execute a health promoting behavior.

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Introduction:-

Acquired Immune Deficiency Syndrome or commonly known as (AIDS) is caused by HIV that enervates the immune system, thus making the body susceptible to aggressive & opportunistic diseases like pneumonia, tuberculosis and other malignant tumors that often result to death. In the recent data from UNAIDS (2017) seventy-eight million people have become infected since the start of the epidemic in 1981. In the year 2016, the joint study of World Health Organization and UNAIDS have estimated 36.7 million people worldwide were living with this disease and its complications. The statistical date includes children with an estimated 1.8 million in numbers. The WHO (2017) reported that about 1 million people died from HIV related cases. The number of people being infected

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by this disease has increased by twenty-seven percent over the past ten years. The consequences of the pandemic span across all spheres of life, the individuals and communities worldwide.

Prevention plays a key role in combating the widespread of the HI virus globally, where consolidated political, economic and social efforts are required to diminish the risk of vulnerability and transmission (Wairimu, 2011). In one study (Piot, Bartos, Larson, Zewdie & Mane, 2008) comprehensive knowledge on sex education is vital to change the individual's perception, knowledge, attitudes and behavior towards HI virus and other sexually transmitted diseases (STD's). The study also revealed that sex education in schools and other institutions has a significant increase in delaying the onset of first sexual intercourse, increased rates of protected sex or condom utilization and improved perception and behavior towards HIV/AIDS and STI's. A lot of developing countries are working extensively to increase the knowledge, attitudes and behaviors on HIV and its preventive measures. Most of these programs have been developed to encourage young adult's protective behaviors and sexual risk reduction strategies like condom usage and the utilization of contraception for women, voluntarily engaging in counseling and testing, comprehensive knowledge on HIV and STI's and the needle prick and syringe abuse programs. The results of these strategies have led to a significant rise in HIV perception and behaviors in third world countries (Kiriby, Laris&Rolleri, 2005).

Despite increased evidences of HIV-related knowledge among young adolescents, there are studies that disclosed the aversion of brazenly discussing sex-related issues, health and sexuality. This premise is backed by the study of Bradley (2011) that explains the cultural differences and religious beliefs in some countries and this may take sometime. The knowledge of young adults in terms of condom utilization during their last sexual experience and the casual sexual partner count may widely vary across all nations where access to comprehensive and correct information about HIV/AIDS are different (Crosby, Graham, Milhausen, Sanders & Yarber, 2012).

Withal, in the Philippines, the extreme rates of new HIV infection is highly observed from the young adults within the age range of 15-24. Statistical reports also reveal that there have been an increase proportion of students in the tertiary level who engage in sexual activity including premarital sex, other forms of heterosexual and homosexual intercourse which are risky in nature such as commercial sex and multiple sexual partners (Chen, Liao, Liu, Fang, Li, Tang, Pan & Liao, 2016). According to the DOH Department of Epidemiology (2016) report, the age group with the highest proportion of incidents has evidently become much younger which reported 25% from 2006-2010 to 28% in 2011-2016. The probability of these young adults and adolescents to acquire the HIV infection depends on many factors, this includes engaging in risky sexual behaviors such as unprotected sex with an infected partner or it could be using unsterile injecting equipment (UNICEF, 2016). There have been numerous studies about the association of the level of knowledge and behaviors towards HIV among young adolescents (Shiferaw et al., 2014; Mkumbo, 2013) But there were only few studies that have focused on the young adult's failure to recognize the key determinant of vulnerability.

Comprehensive and good knowledge, attitudes and behaviors towards HIV/AIDS is essential to prevent acquiring the virus and from spreading it. A systematic and effective preventive measures need concise and important information from health care providers and government health agencies. Hence, it is imperative to evaluate the degree of knowledge and behavior of tertiary school students or the young adults of Ormoc City towards HIV/AIDS. Also, the study aims to explore the most appropriate source of obtaining HIV/AIDS related information among tertiary school students.

Specifically, this study aims to answer the following questions:

1. What is the level of knowledge towards HIV/AIDS among tertiary school students in Ormoc City?
2. What is the level of behavior towards HIV/AIDS among tertiary school students in Ormoc City?

Methodology:-

A descriptive, survey research design was chosen to explore the degree of knowledge and behavior of tertiary school students towards HIV/AIDS. The respondents of the study were the tertiary school students between 18-24 years old (UN, 2013) both male and female who are enrolled in a public or private higher education institution in Ormoc City. The study covered a total of 500 respondents between 18 to 24 years old who are regular students enrolled in the selected public or private higher education institutions in Ormoc City regardless of religion, gender, educational

background, civil status, sexual preference, with or without sexual history, and must be free from any mental illness will qualify in the study.

The researcher utilized a self-made questionnaire as a tool in data gathering. The questions were transcribed with the help of a language expert to ensure its precision to the original language and crafted based on the scope defined by the problem. After data was obtained, it was tallied and submitted to the statistician for analysis and interpretation of the result was done by the researcher. Using SPSS v.16 (Statistical Package for Social Sciences) the data was presented in tables, percentages and frequency distributions in form of descriptive statistics. Specifically, percentage is used to describe the responses of the respondents in every statement in the questionnaire.

Their responses were compared in terms of which parameters have the highest percentage. Likert scale was also used as arbitrary guide to analyze and interpret the gathered data from the questionnaire with (1) one being the lowest and (4) four being the highest. The knowledge and behaviors practices in the survey questionnaires were taken from the different concepts and meta-paradigms related to the Health Belief Model based on the comprehensive literature review conducted by the researcher. The major concepts or meta-paradigms will be identified based on the common or most agreed perception and/or practices having the means of 60% and above. The agreed perception and behaviors will then be analyzed in order to come up with a major concept as data interpretation. Once the major concepts are formulated as a result of data interpretation through the process of induction, they will be sorted accordingly using the Health Belief Model as presented briefly in the theoretical framework of the study. The study was checked and approved by the Eastern Visayas Health Research and Development Consortium Committee.

Table 1:- Distribution of Respondents.

Schools	S-1	S-2	S-3	S-4	S-5	S-6	S-7	TOTAL
Population	3,600	1,400	300	700	600	200	100	6,900
Relative Frequency	52%	20%	4%	10%	9%	3%	2%	100%
Respondents Of Each School	260	100	20	50	45	15	10	500

Results And Discussion:-

Table 2:- Respondent's Demographic Profile (N=500).

Personal Characteristics	Subgroups	Percentage
Age	18-20 years	61.2
	21-24 years	38.8
Gender	male	23.0
	female	77.0
Civil Status	single	92.0
	married	8.0
Year Level	1st year	40.0
	2nd year	24.0
	3rd year	22.4
	4th year	13.6
School	S-1	51.8
	S-2	20.2
	S-3	4.0
	S-4	10.0
	S-5	9.0
	S-6	3.0
	S-7	2.0

Of the 500 young adults recruited, 61.2% belong to the age group of 18-20 years old and 38.8% are under 21-24 years old. In terms of gender, 23% are males and 77% are females. Most of the respondents were single comprising 92% of the study sample, while only 8% were married. In terms of year level, 1st year level (40%) has the most number of students and 4th year level (13.6%) has the least. Among the demographic data, gender is considered a significant variable because it showed that men have lesser knowledge compared to women. However, in terms of behavior, they scored positively. This may be attributed that gender attitudes, practices and behavior tend to bolster young men's dominance in sexual interactions (Campbell, 1995; Weiss et al., 2000). Furthermore, alcohol consumption and substance abuse is more common among young men than women which is considered to be a predisposing factor to HIV risk by reducing condom use or not using the method at all. (LaBrie et al., 2002).

Table 1. 0 Overall Level of Knowledge Towards HIV/AIDS (N=500)

	mean	description
Level of Knowledge Towards Hiv		
1. Comprehesive Knowledge	2.77	A
2. Young Adults Knowledge On Sexual Health	3.44	SA
3. Knowledge On Public Health And Information	3.35	SA
Overall mean	3.19	Agree

Legend Interpretation:

	3.25-4.00 – Strong Agree (SA)		1.75-2.49 – Disagree (D)
	2.50-2.24 – Agree (A)		1.00-1.74 – Strongly Disagree (SA)
	High mean score		Low mean score

Table 1.0 reveals the overall level of knowledge of all respondents which is 3.19 and is interpreted as “Agree”. Parameter number 1 shows a slight variation to the average mean score (2.77) compared to the other two parameters. This disparity may be attributed to the two items in parameter number 1 which showed negative response specifically in the statement “A person’s chance of getting HIV is great” and “There is evidence that mosquito bites can transmit HIV” which resulted to 71.0% and 66.2% respectively. This revealed a strikingly low level knowledge towards HIV particularly on how they perceive a healthy person as less likely to be infected with the virus. This result creates a confusion and misconception regarding the transmission of the disease. This may be attributed to the lack of information being disseminated in schools about sexual health. A similar study conducted in Malaysia revealed that 41.6% of young adults still thinks that HIV can be determined by looking at a person’s appearance (Wong et. al., 2008) and 48% of young adults in Zambia reported that a healthy living person is less likely to be infected with In terms of the misconception about the mosquitoes as vector for the transmission this could also be attributed to the lack of awareness campaign towards HIV in most schools. Although their degree of knowledge is high in terms of the knowledge on public health and information, there are still young adults who believe that this misconception and myth still exist. This result is supported by similar studies conducted in Malawi, despite rigorous efforts to spread public awareness in their country, 38.9% percent of young adults still believes that HIV is transmitted by mosquito bites. Furthermore, studies in Ghana and Kenya revealed that some respondents believe that the blood from an infected individual can be spread thru mosquito bites and touching an infected person (Tenkorang, 2014). Other misconception about HIV is noted in the country of Ghana where a healthy looking individual can not be infected by the virus (Ross, Eissen, & Torres, 2006).

On average the young female respondents scored slightly higher mean than the young male respondents. Although similar percentage of men and women answered the items correctly as evidenced by mean interpretation of “Agree”. These positive responses is due to the fact that women are not afraid to know their HIV status, not afraid to talk about sexual health and does not feel embarrassed acquiring HIV test kits in the pharmacies. This could be explained in the study of Vermeren (2015) she explained that most men, by contrast spend a lot of time in the social media to harbor information they need to establish influence. As such, social media helps them conduct research and gather relevant information about something.

In parameter 3, there are more students who agreed than who disagreed to all of the 3 statements. The positive results among these young adults could be explained to the recent drive made by the government, the Philippines’ strong efforts against the spread of the epidemic has seen positive results through NGO linkages and the private sectors. These private sectors who are advocates of HIV/AIDS awareness conducts counseling and information to High school students. This is also supported by the DepEd which has approved the integration of an age-appropriate

and culture sensitive sex education in the curriculum which includes the basic elementary level and the High school level. In item number 21, the HBM or Health Belief Model and Pender's are applied because young adults will view HIV/AIDS as a negative health consequence and their desire to avoid these negative consequences can be used as a motivation for sexually active young adults into practicing safe sex (condom utilization, avoiding multiple sexual partners). It is important to note that avoiding the negative health consequence (HIV/AIDS) is the key element why this research is guided by the Health Belief Model. In general, 90.7% (43.4% agreed and 47.3% strongly agreed) agreed to the statements related to their knowledge on public health and information. Therefore, more students have positive knowledge on public health and information.

Table 3:- Overall Level of Behavior Towards HIV/AIDS (N=500).

	mean	description
Level of Behavior Towards Hiv		
1. Condom Utilization	2.91	A
2. Difficulty In Negotiating Condom Use	2.94	A
3. Risky Sexual Behaviors (Drug Use/Alcoholism)	2.98	A
4. Multiple Sexual Partners/Casual Sex	3.01	A
Overall mean	2.96	Agree

Legend Interpretation:

	3.25-4.00 – Strong Agree (SA)		1.75-2.49 – Disagree (D)
	2.50-2.24 – Agree (A)		1.00-1.74 – Strongly Disagree (SA)
	High mean score		Low mean score

Table 3 reveals the study respondent's overall level of behavior towards HIV. With regards to the level of behavior towards condom utilization and difficulty in negotiating them, the student's reported an average mean score of 2.91 and 2.94 which are all interpreted as "agree" or a showed a positive behavior towards the use and negotiating condom. Most young adults, perceived condom utilization as extremely beneficial as a practice or method to prevent the transmission of HIV/AIDS infection thus, it greatly influenced their knowledge on condom utilization. In general, 75.8% (54% agreed and 21.8% strongly agreed) agreed to the statements related to condom utilization. Regardless of age, the respondents agreed that their condom knowledge was greatly influenced by perceived benefits of condom as an effective method of contraception and prevention on the transmission of infectious diseases like HIV/AIDS.

The respondents agreed that they have the competence in using the device easily and have confidence in influencing others to use it that is why they have the ability to recommend it to their partners and refuse sex if it is not being used. This result is contrary on the study conducted in India reported that problems related to not using condom is due to partner's acceptance and their ability to influence their partner because they perceived that asking to use condom indicates infidelity (Donta, Begum, & Naik, 2014). On the other hand, 75.2% respondents agreed that condom doesn't fully protect them HIV/AIDS which showed a positive knowledge towards HIV. In the context of purchasing condoms in any drugstore or convenience stores, 30.6% of the students still perceive that acquiring them in those places are still hard for them. The explanation may be that condoms are sold in public places like pharmacies and groceries and it cannot be avoided that the perception of some people when they have seen someone buys condom they would think about promiscuity. Hence, it is very hard for them to avail it without avoiding the judgmental attitude. This supports Pender's (2011) assumption that high level of competence or self-efficacy influences the person to perform a healthy behavior as evidenced by the respondents' ability in influencing others to use condom and have the skill to use it correctly, but they cannot avail because they feared of public embarrassment or humiliation.

The positive high result is due to the fact that most young adults nowadays are now exposed to literatures and awareness campaigns regarding condom utilization hence the greater knowledge and behavior towards condom use. Both gender agreed that they have heard the benefits of condom use from peers, schools, mass media and most importantly the social media. This is also due to the fact that most youth-friendly clinics are now easily accessible to the students because they are now present in schools and universities. According to Pender (2011), persons commit to do a healthy behavior when they anticipate valued benefits in performing the behavior as evidenced by the respondents' perception that condom is an effective method of transmission of HIV/AIDS which would likely for them to take action toward the performance of a health promoting behavior.

In parameter 3, There are more students who agreed than who disagreed in every statement regarding risky sexual behaviors. In general, 76% (47.3% agreed and 28.7% strongly agreed) agreed to the statements related to risky sexual behaviors. The overwhelming positive behavior towards both gender is explained by their comprehensive knowledge towards HIV risks and its predisposing factors like alcohol and substance abuse. Most young adults acknowledge that they are confident in refusing any social gathering that would lead them to consume heavy amounts of alcohol thus, preventing any further risky sexual behavior. This is attributed to the constant reminders and government ads regarding the bad effects of alcohol and drugs. Most students are also well aware of the comprehensive law against prohibited drugs in the country. Also, the president himself is pushing for the lowering of minimum age of criminal liability.

Based on the responses made by the respondents, they are fully aware that alcoholism and drug abuse is a predisposing factor leading to risky sexual behavior. This is true to the study conducted by Shafer et. al. (2010) in his 38-month survey among agricultural workers in Kenya, study respondents who consumed, large amounts of alcohol engage in risky sexual behaviors and these study participants are more likely to become infected with HIV/AIDS. The student's positive response in not engaging alcohol and substance abuse may be attributed to the recent drug war in the Philippines. In one developmental study (Geronimo, 2014) reported that there was a huge drop in vices, particularly drug related abuse among young Filipinos in the last eleven years because of the bloody war being waged in the slums, villages and big cities against any suspected drug users and dealers.

For parameter 4, The positive attitude towards multiple sexual partners may have been attributed to the sexual encounters of Filipino young adults happens in the context of a committed relationship. Most empowered young adults today specially women, can now easily turn down casual sex due to the fact that they are now more knowledgeable about the risk of getting the infection and that women as well are monogamous in nature. Although there is great evidence in some related studies, that casual sex and sex in multiple partners happens mostly in young adults.

Another reason for the positive response among young adults could be attributed to the time allocated on social media for single respondents and the time allocated by married individuals to their different families. Most married respondents spent most of their times with their loved one, caring for their child and school while single respondents spent most of their times on social media and school rather than thinking about getting married thus, making them less prone to risky sexual behaviors like engaging multiple sexual partners and casual sex. Because of advent of social media information around the globe, young adults worldwide are now more knowledgeable about HIV/AIDS transmission and they are more likely to discuss this with their peers, sexual partners and parents. This further explains why more students have positive behavior on multiple sexual partners/casual sex.

Conclusion & Recommendations:-

The study revealed that almost all of the young adults enrolled in tertiary schools of Ormoc City both male and female have a good level of knowledge towards HIV/AIDS and this should be taken as a good indicator of the positive results of the awareness campaign made by different organizations around the globe. However, the lower mean score of male (3.16) compared to the female respondents (3.20) in terms of the degree of comprehensive knowledge towards HIV is indicative of low level knowledge and is a cause for concern. The majority of the respondents didn't feel they are at risk of HIV as evidenced in the results of statement number 1 which revealed that 61% of them still thinks that a healthy looking person is not at risk of acquiring the infection.

Although there's a sheer evidence of a rather good and comprehensive knowledge towards HIV, a lot of intervention still needs to be done particularly on the constant awareness and extensive sexual health educational programs because 100% of the study respondents are already in college level and knowing that basic sexuality is integrated in some of the basic subjects like Psychology, these young adults would have reported good knowledge and positive behaviors towards the disease.

The schools in cooperation with the government should begin to integrate sex education to the secondary level. Student's should be introduced to STD's particularly HIV/AIDS preventive measures before they reach the full puberty provided that the school will discuss age-appropriate lectures and awareness programs. The government should also make health services more youth-friendly. In this way it will lead to increase use of facilities by young adults in the city thus, increasing their knowledge about the infection specially on their HIV status. Sensitizing health workers and NGO's staffs are essential to make sure these young adults get the services they need.

Acknowledgements:-

This work would not have been possible without the financial support of the Office of the Research and Development of Eastern Visayas State University of Ormoc City. I am especially indebted to Dr. Ma. Erenita V. Bahian, the Head of Research and Development of EVSU-OCC who have been supportive of my career goals and who worked actively to provide me with the protected academic time to pursue those goals.

I am grateful to all of those with whom I have had the pleasure to work during this and other related projects. Each of the members of my research group has provided me extensive personal and professional guidance and taught me a great deal about both scientific research and life in general. I would especially like to thank Dr. Joel Ray Acob, the research coordinator of Visayas State University – School of Nursing as my teacher and mentor, he has taught me more than I could ever give him credit for here. He has shown me, by his example, what a good nurse educator (and person) should be.

Nobody has been more important to me in the pursuit of this project than the members of my family. I would like to thank my parents, whose love and guidance are with me in whatever I pursue. They are the ultimate role models.

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