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KNOWLEDGE AND AWARENESS ON HIV/AIDS OF SENIOR HIGH SCHOOL STUDENTS TOWARDS AN ENHANCED REPRODUCTIVE HEALTH EDUCATION PROGRAM

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Abstract

The study determined the levels of knowledge and awareness on HIV/AIDS of 369 senior high school students of Los Banos Laguna, Philippines, towards an Enhanced Reproductive Health Education Program using an adopted and modified questionnaire from the research study of Marc Lester Quintana in 2018. The results were: high level of knowledge on HIV/AIDS in terms of transmission, prevention and protection; high level of awareness about the effects of HIV/AIDS in terms of physical, psychological, socio-economic and spiritual; there is a significant relationship between the levels of knowledge and awareness about the effects of HIV/AIDS. It was recommended that: senior high school students to become more knowledgeable and updated about HIV/AIDS; they should participate in activities in school in partnership with their educators and school administrators for the implementation of the Enhanced Reproductive Health Program, as permitted by their parents; and lastly future researchers to use this study and its output as a reference for similar future endeavors.

Keywords

HIV/AIDS, Knowledge on HIV/AIDS, Awareness on HIV/AIDS, Knowledge and Awareness on HIV/AIDS of Senior High School Students, Enhanced Reproductive Health Program

1. Introduction

It is said that knowledge is power. Cliché as it is but this is a saying that many times has been proven true. In fact, knowledge and information have significant impact on people's lives especially to the youth of the society. This is so because accordingly, knowledge serves as a personal value to every human in that it is the base of one's individuality (http://www.pitlanemagazine.com).

According Dr. Robert Puff (2012), in his article entitled, "*Awareness: The Cornerstone of Changing our Behavior*," awareness is the powerful tool that brings about change in the lives of humans. He emphasized that it is through awareness that we learn from our past actions or behavior and with learning humans lead a happier and healthier life as mistakes are being managed better (https://www.psychologytoday.com). Both knowledge and awareness therefore, are ingredients that play an important part in the everyday life of the youth. This is evidently true to the scenario of the youth worldwide in their knowledge and awareness of HIV/AIDS.

HIV/AIDS for so long had been one major health problem that has detrimental effects on humans and continues to be as it is to date. It can be acquired at any life stage among different population with high risk behaviors. Vulnerable groups do not only include OFW's, migrants, sex workers, IV drug users sharing needles, men who have sex with men (MSM), incarcerated people but also the youth (CDC, 2018). Here in the Philippines, according to the latest report from the Department of Health Epidemiology Bureau, in June 2018 new cases were found as there were 993 new HIV antibody seropositive individuals reported to the HIV/AIDS & ART Registry of the Philippines (HARP). More than half (52%, 512) were 25-34 years old and 29% (287) were 15-24 years old at the time of testing. Of all the newly diagnosed cases reported in the country in the same month (June, 2018), Region 4A has been second, among the top six regions, in the number of most cases having 167 or 17%. Other regions included are the National Capital Region (NCR) (33%, 324), Region 3 (12%, 123), Region 6 (7%, 66), Region 12 (6%, 58) and Region 7 (6%, 55). Together, they account for 80% of the total. In the same report, since 1984, there have been 56,275 confirmed HIV cases reported to the HARP. More than half (28,773 or 51%) were from the 25-34 year age group while 15,834 (28%) were youth 15-24 years old. Seventy-nine percent (44,603) of the total diagnosed cases in the Philippines were

reported from January 2013 to June 2018. Eleven percent (6,040) of the total ever reported cases had clinical manifestations of advanced infection at the time of reporting (WHO clinical stage 3 and 4).

Looking at the situation above and being a mother of teenagers (ranging from millennial to generation Z), who are open to the influences of early engagement in sex or premarital sex with the advent of technological media, the researcher observed that her children are not an exemption to this phenomenon. As such, the fear of her children being inflicted with such illness, with insufficient knowledge on HIV/AIDS served as the moving force to further investigate on how much these teenagers know and how help can be administered amongst them. Specifically, the researcher, being a resident in the same region, would want to address the increased number of cases found in Region 4A, which is currently the second (2^{nd}) to the highest with newly found cases.

Through this study, the researcher would improve the Reproductive Health Education Program initiatives already interspersed in the curriculum of the Senior High School (SHS) under the Department of Education (DepEd). This program intends to help the senior high school students and teachers of both public and private Senior High Schools in Laguna, specifically of those belonging to the second district covering three (3) municipalities, that of Bay, Los Banos and Cabuyao, in terms of better dissemination of knowledge and information about HIV/AIDS through the use of various techniques and strategies that makes teaching and learning about HIV/AIDS effective.

2. Method

This study utilized Sequential Explanatory Design mixed method. This research design was used to determine the knowledge and awareness on HIV/AIDS of the 369 senior high school students of the municipality of Los Banos Laguna towards an enhanced Reproductive Health Education Program.

3. Results

3.1 What is the Profile of the Senior High School Students-Respondents?

Table 1 shows the profile of the senior high school students-respondents. In terms of age, the highest belongs to those belonging to the age 17 – 18 years old with 72.4 per cent or 267 out of 369; the lowest is those belonging to more than 20 years old with only 1.4 per cent or 5 out of

369. This suggests that the respondents were on their right teen age as senior high school students, and few were only beyond this normal age for senior high.

In terms of gender, 68 per cent comprises the female population, while 30.6 per cent comprises the male population; the lowest were those belonging to other type of gender with only 1.4 per cent. This finding indicated that female dominates the population of the senior high school locales of this study.

Table 1: *Profile of the Senior High School Student-Respondents*

Profile		Frequency	Percentage
AGE	15 – 16	69	18.7%
	17 - 18	267	72.4%
	19 – 20	28	7.6%
	More than 20 years old	5	1.4%
	Total	***369***	***100.0%***
GENDER	Male	113	30.6%
	Female	251	68.0%
	Others	5	1.4%
	Total	***369***	***100.0%***
SOURCE OF INFORMATION *(A. From a person)*	Parents	147	39.8%
	Friends	14	3.8%
	Relatives	7	1.9%
	Nurse	16	4.3%
	Doctor	60	16.3%
	Combined (parents, nurse, doctor)	65	17.63%
	Combined (parents, friends, doctor)	34	9.21%
	Combined (parents, doctor)	26	7.05%
	Total	***369***	***100.0%***
(B. From an institution)	Health Center	227	61.5%
	Hospital	52	14.1%
	School	62	16.8%
	Combined (Health Center, School)	11	2.98%
	Combined (Health Center, Hospital, School)	17	4.62%
	Total	***369***	***100.0%***
(C. Media)	Television	64	17.3%
	Internet	200	54.2%
	Radio	105	28.5%
	Total	***369***	***100.0%***

In terms of source of information: from a person source of information, the highest is from parents with 39.8 per cent or 147 out of 369; second highest is from combined sources (parents, nurse and doctors) with 17.63 per cent or 65 out of 369; the lowest is from relatives with only 1.9 per cent or 7 out of 369. This finding depicted that parents were the most trusted person of the senior high school student-respondents in terms of being the source of their information specifically in terms of their health. This is attested by the works of Kim (2007) which said that

There is a correlation between parental values on teen sex and teen sexual behavior; and that parents are the single largest influence on their adolescents' decisions about sex. This is because parents can enhance prevention of a variety of negative outcomes and enhance their child's overall health promotion;

In terms of institution as source of information, the highest is from Health Center with 61.5 per cent or 227 out of 369; second highest is from school with 16.8 per cent or 62 out of 369; the lowest is from combined sources (Health Center and School) with only 2.98 per cent or 11 out of 369; This finding depicts that most of the respondents get their information from the Health Centers, simply because the health functions were largely devolved to these primary care units around provinces and municipalities in the country. Another reason was the presence of volunteer health workers (trained by the doctors and nurses of the Health Centers) assigned in the specific Health Centers in the community who roams around and visits the community every day. They are partners in the community who entertain questions specifically about health; and they are accessible every day of the week at all hours and usually lived within walking distance to the service users that is why they could easily approach them when needed. This is confirmed by the works of Bhutta, Lassi, Pariyo and Huicho (2010) which reported that the use of Community Health Workers (CHWs) in healthcare provision is increasing worldwide; and that in particular, CHWs have become a central feature of many Primary Health Care (PHC) programs in resource-poor areas of low-income countries; they are also viewed as important contributors to achieving the Millennium Development Goals (MDGs) which aim to provide universal access to reproductive healthcare.

In terms of media as source of information, the highest is from the Internet sources with 54.2 per cent or 200 out of 369; second highest is from radio with 28.5 per cent or 105 out of 369; the lowest is from television with only 17.3 per cent or 64 out of 369. This finding indicates that the respondents were using the internet mostly for information about their health. This is because many of the evidence-based practices were posted in the net and can be accessed by anyone who likes to be informed and learned. In addition, internet is a fundamental part of the daily life of adolescents mainly because it is fast and easy and because it provides a great deal of information. This finding is confirmed by Jiménez-Pernett et al (2010) who stated that the Internet is a fundamental part of the daily life of adolescents, that they consider it as a safe and confidential source of information on health matters.

3.2. What is Level of Knowledge on HIV/AIDS of Senior High School Students-Respondents in terms of:

3.2.1. Transmission

Table 2: *Level of Knowledge on HIV/AIDS of Senior High School Student-Respondents in terms of Transmission*

Items	Weighted Mean	Interpretation
1. the air	1.45	Very High Level of Knowledge
2. sharing of food utensils or dishes used by a person infected with HIV	2.26	High Level of Knowledge
3. the bite of a mosquito	2.04	High Level of Knowledge
4. using public toilets	2.16	High Level of Knowledge
5. swimming in a public pool	1.93	High Level of Knowledge
Overall Mean Score	***1.97***	***High Level of Knowledge***
6. HIV-infected woman to her child during pregnancy or childbirth	3.13	High Level of Knowledge
7. "deep" kissing" or exchange of saliva from a person infected by the virus	2.69	High Level of Knowledge
8. the use of contaminated nail cutter, pusher, and nipper during manicure or pedicure	1.99	Low Level of Knowledge
9. sharing contaminated needles like in body piercing, ear piercing or having tattoo	3.08	High Level of Knowledge
10. having sexual contact with an infected person without using a condom	3.82	Very High Level of Knowledge
Overall Mean Score	***2.94***	***High Level of Knowledge***

LEGEND:

WEIGHTED MEAN (Positive Statements)	INTERPRETATION	WEIGHTED MEAN (Negative Statements)
3.25-4.00	Very High Level of Knowledge	1.00-1.74
2.50-3.24	High Level of Knowledge	1.75-2.49
1.75-2.49	Low Level of Knowledge	2.50-3.24
1.00-1.74	Very Low Level of Knowledge	3.25-4.00

Table 2 shows the level of knowledge on HIV/AIDS of senior high school students-respondents in terms of transmission, with an overall mean score of 2.94 interpreted as high level of knowledge.

The high level of knowledge when the statements are formed in a negative way (using the myths about HIV/AIDS) means that the senior high school students-respondents still believe in the misconceptions (mistaken ideas) about HIV / AIDS. This finding is supported by the works of Tenkorang (2013) which reported that in Kenya and Ghana, they also believed in myths about HIV/AIDs as they reported that some respondents believe the HIV virus which could be spread through mosquito bites and touching an infected person. The implications for this finding suggests that biomedical explanations of HIV transmission with exclusive focus on ABC prevention knowledge may not be sufficient for dispelling misconceptions about HIV transmission The need and that targeted education at eradicating myths and misconceptions about HIV transmission may be emphasized. This finding is confirmed by the study of Bharat, Menendez, Hagen, Igonet, Schorb and Briggs (2014) which suggested that a clear biological and conceptual understanding of HIV transmission can be useful in rejecting misconceptions surrounding the virus.

According to the World Health Organization (2018), HIV can be principally transmitted from a very infected of it to a non-reactive person through the following ways; unprotected sexual intercourse, blood (sharing of contaminated needles, blood products, and transfusion), and mother to child (pregnancy and breastfeeding). The aforementioned ways of HIV transmission become possible because the four body fluids which can be carriers of the virus are present namely; semen, blood, vaginal fluid, and breast milk.

3.2.2. Prevention

Table 3: *Level of Knowledge on HIV/AIDS of Senior High School Student-Respondents in terms of Prevention*

Items ***HIV/AIDS can be prevented through…...***	**Weighted Mean**	**Interpretation**
11. the use of condom	3.22	High Level of Knowledge
12. isolation of the room of an HIV/AIDS infected person	2.51	High Level of Knowledge
13. getting tested and treated for STD	3.28	Very High Level of Knowledge
14. birth control methods	2.76	High Level of Knowledge
15. disclosure of the result of HIV/AIDS test by the doctor to the family of the patient	2.70	High Level of Knowledge
16. use of only sterile injections (free from bacteria or other living microorganisms)	3.14	High Level of Knowledge
17. having less risky sex	3.09	High Level of Knowledge
18. limiting the number of sexual partners	3.17	High Level of Knowledge
19. knowing partner's HIV status	3.41	Very High Level of Knowledge
20. quarantine - segregation in which people or animals that have arrived from elsewhere or been exposed to infectious or contagious disease are placed	2.76	High Level of Knowledge
Overall Mean Score	***3.01***	***High Level of Knowledge***

Table 3 shows the level of knowledge on HIV/AIDS of senior high school students-respondents in terms of prevention, with an overall mean score of 3.01 interpreted as high level of knowledge.

The result of high level of knowledge on HIV /AIDS prevention means that the senior high school-respondents knows but not to the greatest or very high level how HIV/AIDS is being prevented. This finding suggests that there is still a need for enhancement in the student's learning capacity to be able to acquire more knowledge about HIV/ AIDS prevention. This is supported by the works of Tulloch et al., (2012) which suggested that increasing HIV knowledge has been an effective HIV preventive behavioral intervention across different contexts. The authors added that elevating HIV knowledge creates motivation for risk reduction and has been associated with increased safe sex practices and HIV testing and treatment uptake.

Lack of rigorous evaluations about how HIV/AIDS can be prevented means lack of reliable evidence to guide the selection of interventions that can be implemented. This is why the senior high school students-respondents chose number 19, about knowing partner's HIV status, as their highest item on the table. According to the study of Appiah-Agyekum and Suapin (2013) it is

now accepted globally that knowing the person's HIV/AIDS status can help prevent HIV/AIDS transmission. Though knowing the person's status cannot directly prevent infection from the virus, knowing the person's status is the key step in making decisions on their health. In other words, knowing the person's status means that they could make choices that can prevent persons around them from contracting the virus (that is, if they are infected) or the know-how to live healthily to prolong their life. The implication for this finding is that the senior high school students can prevent being infected that they knew that their sexual risk decisions are affected by their sexual partners' HIV status. With this kind of attitude, they can also tell others that this is one way of preventing the spread of HIV /AIDS infection.

3.2.3. Protection

Table 4: *Level of Knowledge on HIV/AIDS of Senior High School Student-Respondents in terms of Protection*

Items	Weighted Mean	Interpretation
21. A person with HIV who has an undetectable viral load can pass HIV to someone else	3.05	High Level of Knowledge
22. Unprotected male to male sexual contact is riskier in getting HIV than unprotected male to female sexual contact	2.96	High Level of Knowledge
23. A person with HIV who is sick or who has no symptoms cannot pass HIV to someone else	2.21	High Level of Knowledge
24. Drinking alcoholic beverages increases the risk of HIV infection	1.86	Low Level of Knowledge
25. Adolescents/young adults can be infected by HIV	3.27	Very High Level of Knowledge
26. Anyone who injects prohibited drugs is at risk of contracting HIV	2.50	High Level of Knowledge
27. Having a sexually transmitted infection increases the risk of getting HIV	3.15	High Level of Knowledge
28. Waiting for HIV signs and symptoms to appear before getting tested	2.13	Low Level of Knowledge
29. Dismissing or terminating an employee from being positive with HIV to protect his/her co-workers	2.14	Low Level of Knowledge
30. Getting immunization and vaccination to protect oneself from acquiring HIV/AIDS	3.01	High Level of Knowledge
Overall Mean Score	***2.63***	***High Level of Knowledge***

Table 4 illustrates the level of knowledge on HIV/AIDS of senior high school students-respondents in terms of protection, with an overall mean score of 2.63 interpreted as high level of knowledge. This finding indicates that the senior high school students were knowledgeable on HIV/AIDS risks and protection. It can be traced to the fact that as students they were lectured at school on how the immune system of a person worsens, a variety of complication arises. These lessons would tell them that the first sign of infection is large lymph nodes or "swollen glands" that may be enlarged for more than three months. Other symptoms often experienced months to years before the onset of AIDS include: lack of energy, weight loss, frequent fevers and sweats, persistent or frequent yeast infections (oral of vaginal), persistent skin rashes or flaky skin, pelvic inflammatory disease in women that does not respond to treatment, and short term memory loss. With knowledge about the modes of protection, senior high school students can easily acquire strategies on how to deal with people with HIV/AIDS or have activity with them. The

implication for this finding is reduction of the risks and increase in protection for the respondents. This is supported by the works of CDC (2015) which reported that the most effective way of slowing or stopping the progression of HIV is through early diagnosis and appropriate drug therapy.

3.3. What is the level of awareness of senior high students about the effects of HIV/AIDS in terms of:

3.3.1. Physical

Table 5: *Level of Awareness of Senior High Students about the Effects of HIV/AIDS in terms of Physical*

Items	Weighted Mean	Interpretation
31. HIV kills or damages the cells of the body's immune system	3.45	Very High Level of Awareness
32. HIV infection causes large lymph nodes or "swollen glands" that may be enlarged for more than three months	2.89	High Level of Awareness
33. HIV infection causes persistent skin rashes or flaky skin	2.76	High Level of Awareness
34. HIV infection causes persistent or frequent yeast infections (oral of vaginal)	2.92	High Level of Awareness
35. HIV infection causes lack of energy	2.98	High Level of Awareness
36. HIV infection causes frequent fevers and sweats	2.86	High Level of Awareness
37. HIV infection causes pelvic inflammatory disease in women that does not respond to treatment	2.79	High Level of Awareness
38. HIV infection causes weight loss	2.86	High Level of Awareness
39. HIV infection causes short term memory loss	2.21	Low Level of Awareness
40. HIV-positive people are vulnerable to other infections, diseases, and complications	3.15	High Level of Awareness
Overall Mean Score	***2.89***	***High Level of Awareness***

LEGEND:

WEIGHTED MEAN (Positive Statements)	INTERPRETATION
3.25-4.00	Very High Level of Awareness
2.50-3.24	High Level of Awareness
1.75-2.49	Low Level of Awareness
1.00-1.74	Very Low Level of Awareness

Table 5 shows the level of awareness of senior high students about the effects of HIV/AIDS in terms of physical, with an overall mean score of 2.89 interpreted as high level of awareness. This finding means that the senior high school students – respondents were aware on how HIV/AIDS can affect the physical statute of a person, although not to the greatest extent meaning there are some information about HIV/AIDS that they do not know; this finding is consistent with the other findings above of only high level of knowledge. It is also congruent to the result of the study by Othman (2015) which reported that around 45% of students had good knowledge scores about HIV/AIDS and were aware that HIV can be transmitted through blood transfusions, from mother to child, and through sharing needles or syringes; however, they were confused about some routes of transmission. The implication for this is that they still need enhancement in terms of being educated about HIV/AIDS. A better understanding of these challenges will guide them towards more effective self-care management. This is confirmed by

the study of Li et al., (2006) which stated that patient education is important to encourage the patients to use self-help strategies.

Group of senior high school students during the structured interviews, when asked about the risk of having short term memory loss for people infected with HIV/AIDS; they answered that they really do not know how extensive this memory loss is but when they look or understand what HIV/AIDS can do to a man's immune system, then definitely it can cause things like loss of short term memories. The senior high school students expressed that they are aware about the risks of HIV/AIDS; and that because of it the person infected may lose the strength of their immune system, this in turn can cause memory loss; others feel that this memory loss is just a start of the many things that can happen when people got to be infected with HIV/AIDS.

"I am aware that one of the risk of HIV infection is to lose the strength of the immune system. Maybe this is the reason why we can lose our short term memory too if we have HIV/AIDS."

"I believed that HIV/AIDS can be so dangerous to anyone and short memory loss is just a start. There are still many things at risks in terms of our health when it is being related to HIV/AIDS."

Another set of senior high school students verbalized that they does not know exactly why there is loss of memory when a person is infected by HIV/AIDS. They feel that this can be attributed to the fact that they are not the ones really affected with it.

"I barely know HIV/AIDS can cause loss of memory. Maybe because we are not the patient ourselves or have not encountered yet person infected with HIV/AIDS."

"HIV/AIDS is a very vague illness. Learning from our lessons in school, I feel that loss of memory is one of the effects of the illness and many more adverse effects can come from having the illness."

Another senior high school student expressed that she believed that HIV/AIDS is dangerous and memory loss is just a part of its effects."

"I believed that HIV/AIDS can be so dangerous to anyone and short memory loss is just a start. There are still many things at risks in terms of our health when it is being related to HIV/AIDS."

This finding is supported by the study of Hardy and Vance (2009) which stated that memory is but one of many cognitive domains adversely affected by HIV, including executive functioning (i.e., reasoning), speed of processing, attention, psychomotor ability, and language. The authors added that the decline in one domain such as speed of processing may adversely affect another domain such as memory. The incidence of forgetfulness and cognitive problems varies and may increase by age, certain types of comorbidities (e.g., hepatitis C), substance use, and mood disturbances (Vance, Ross et al., 2008).

3.3.2. Psychological

Table 6: *Level of Awareness of Senior High Students about the Effects of HIV/AIDS in terms of Psychological*

Items	Weighted Mean	Interpretation
41. HIV infected person usually confront fear and denial while maintaining hope	2.92	High Level of Awareness
42. HIV infected person may feel (or imagine) being victimized	3.01	High Level of Awareness
43. HIV infected person can experience a decrease in self-esteem as they are no longer confident in themselves or what they can achieve	3.34	Very High Level of Awareness
44. HIV infected person are seen as lesser persons and are at times devalued	3.09	High Level of Awareness
45. HIV infected person feels frustrated and demoralized	3.05	High Level of Awareness
46. HIV infected person usually have emotional breakdown because their feelings continue to be suppressed	3.25	Very High Level of Awareness
47. HIV infected person have to adjust to a new lifestyle	3.09	High Level of Awareness
48. HIV infected person feel loss of support by lovers, family, and friends	2.87	High Level of Awareness
49. HIV infected person feel the need to change their sexual practices	3.04	High Level of Awareness
50. HIV infected person need to take more precautions to protect themselves and others	3.38	Very High Level of Awareness
Overall Mean Score	***3.10***	***High Level of Awareness***

Table 6 presents the level of awareness of senior high students about the effects of HIV/AIDS in terms of psychological, with an overall mean score of 3.10 interpreted as high level of awareness. This finding suggests that the senior high school students of were highly aware about the effects of HIV / AIDS in terms of psychological aspect. The rationale for this is that nowadays, people with HIV/AIDS do not anymore hide. They revealed themselves in order to help others in combating the effects of HIV/ AIDS. This cause an increase in the awareness of every student especially that in every school, this battle with HIV/AIDS is now being strengthen. Many organizations are now leading the way to implement different programs that might help people infected with HIV/AIDS. According to Walker and Gilbert (2010) AIDS is a disease that is feared this was the most common reason patients hide their diagnosis is fear of stigma and exclusion. Additional education is needed to help the patient understand that AIDS requires long-term treatment and observation and that they can help control the disease with positive health-promoting behavior. This is supported by the works of Li et al. (2006) which said that changes in attitude and behavior can be achieved through patient education.

3.3.3 Socio-Economic

Table 7: *Level of Awareness of Senior High Students about the Effects of HIV/AIDS in terms of Socio-Economic*

Items	Weighted Mean	Interpretation
51. HIV infected person see themselves as undesirable by others who view them as “contagious”	3.14	High Level of Awareness
52. HIV infected person becomes socially isolated	3.01	High Level of Awareness
53. Families and communities of HIV infected person break apart and young people's future becomes insecure.	2.75	High Level of Awareness
54. HIV infected person are restricted to travel specially abroad	2.57	High Level of Awareness
55. HIV/AIDS infected person require significant and costly medical care.	3.12	High Level of Awareness
56. HIV infected person rely heavily on family and friends for emotional and financial support	2.92	High Level of Awareness
57.HIV infected person are not granted an opportunity to gain access to life	2.39	Low Level of Awareness

insurance policies		
58. HIV infected person are not given chances to work because they cannot engage in the normal activities	2.43	Low Level of Awareness
59. HIV infected person usually loss their job	2.66	High Level of Awareness
60. HIV infected person usually sells their assets to meet expenses	2.59	High Level of Awareness
Overall Mean Score	***2.76***	***High Level of Awareness***

Table 7 illustrates the level of awareness of senior high students about the effects of HIV/AIDS in terms of socio-economic, with an overall mean score of 2.76 interpreted as high level of awareness.

More often, person infected with HIV/AIDS complain of problems in socio-economics as they progress through the stages of the illness. Medical check-ups and medications deplete their earnings, some would ask for help because they cannot attend to the economic needs of their family. Because of this, most of the people around them are aware that this suffering socio-economically is brought about by the illness HIV/AIDS. This is the reason why even the senior high school students knew that it affects so much the person infected with HIV/AIDS. This is also the reason why they chose as number 1 or the highest the item about HIV infected person becomes socially isolated, with mean score 3.21 interpreted as high level of awareness. This is because; person infected with HIV.AIDS becomes isolated once they felt they cannot do anything anymore especially in terms of work and earnings. This is supported by the works of Dray-Spira et al (2006) which revealed that loss of employment appears in 46 % of the affected persons within 1 year after HIV infection, which indicates that the risk of becoming unemployed is highest shortly after infection. This also leads to the choice of the lowest item, about HIV infected person are not granted an opportunity to gain access to life insurance policies, with mean score of 2.54 interpreted also as high level of awareness. It was their last because the senior high school students believe that employers would not want to isolate their employees with HIV/AIDS nor abandoned them. They still have the right to be given or access their life insurance policies.

Group of senior high school students during the structured interviews, when asked about their level of awareness about the effects of HIV/AIDS in terms of socio-economic; they answered that they know that socially and financially person infected with HIV/AIDS are so affected. They knew that other people would not support or help these patients because they blame them for having the infections.

"I am sad those people infected with HIV/AIDS are not supported mostly by other people. They even blame the patients that they were the ones that caused it."

One senior high school student said that his mother is a nurse and she always tell him that it is sad to know that people infected with HIV/AIDS are not given many chances at work. Usually she would tell him that they are being fired or laid off.

"*My nurse mother would always tell me, it is really sad to know that people infected with HIV/AIDS are not given too many chances at work; that sometimes they are being laid-off from work because they are infected."*

One senior high school student expressed that is so sad to know.

"That is so sad to know!" How can these people do this to sick people!"

The lead senior high school student from LSPU added:

"It is really sad and disrespectful that sick people with HIV/AIDS were not given the same chances as the normal people. Maybe it is our task to let others know how these people feel and how can we help them achieve at least happiness in life."

"I believed that HIV/AIDS can be fatal in all aspects. When people knew that someone is with HIV/AIDS, they are being stereotyped and judged the infected person at once without knowing the real reason for the transmission of the infection. Somehow, their work is the reason for it, like needle prick as a nurse or as a doctor."

Beyond the direct costs of medications, monitoring, and medical care, additional costs include the long-term lost earnings of HIV-infected individuals as well as of their household members who also provide care. One of the respondent said that these financial problems prevent infected people to seek treatment. She quote and quote her uncle saying:

"*I do not seek services beyond those provided here because they are expensive".*

With that verbalization, one of the student reacted that she feels that the infection caused the patients to be broke and to not afford their means of daily living. Another student said that people with HIV/AIDS are threatened socially and financially that they cannot get a good job to support their means.

"I feel that the infection causes these patients to be broke and cannot afford their daily means of living."

"Socially and financially, these people with HIV/AIDS are threatened / affected. Because of the disease, they cannot get good jobs that will make them pay their bills."

Some of the student-participants told the researcher that if they knew how to protect themselves especially in choosing the right partner, then they cannot be like that.

"I am aware that some people do have their wants and desires in life. However, they must be choosy when it comes to sexual partner or having intimate relationships. Being cautious is good enough to prevent the transmission of the infection."

"I barely know HIV/AIDS can be so fatal that even socially and financially, these people will be so much affected. Maybe because I am still young and my knowledge and awareness are too few about HIV/AIDS."

All these finding is supported by Watstein and Chandler (2008) which reported that there are individuals, who might face catastrophic changes not only in their personal and job relationships, but in their physical bodies and in their self-images and self-esteem. As a result of these changes in both working and personal relationships, the behavior of those infected may change. In lieu of the disruption in their jobs, these people infected with HIV/AIDS may encounter problems with insurances especially medical ones. One student-participant said that her uncle was demoralized when given a chance to talk to an HIV/AIDS infected person. This was because of the dilemma of the patient that they cannot avail anymore of their insurance benefits due to the fact that they have been infected with HIV/AIDS.

"*My uncle when he was given a chance to talk to his HIV/AIDS infected friend told me that he was so demoralized to know that the privilege of this HIV/AIDS infected friend were so low that even insurance companies cannot give them opportunity to use theirs*."

The findings above were evidenced by the results of the study of Quyen et al (2017) which found out that a high proportion of Person Living with HIV/AIDS (PLWH) was not covered by health insurance (HI). The study mentioned that lacking information about HI and feeling difficulty in accessing HI were primary barriers that should be resolved via timely educational campaigns and consultations as well as supports from families in order to expand effectively the HI coverage.

3.3.4 Spiritual

Table 8: *Level of Awareness of Senior High Students about the Effects of HIV/AIDS in terms of Spiritual*

Items	Weighted Mean	Interpretation
61. HIV infected person makes spirituality become an important factor in their lives	2.83	High Level of Awareness
62. HIV infected person looks for a stronger connection with God	2.89	High Level of Awareness
63. HIV infected person seek spiritual support from religious group	2.81	High Level of Awareness
64. HIV infected person regularly attending worship services	2.79	High Level of Awareness
65. HIV infected person engaged in religious/spiritual activities such as praying	2.78	High Level of Awareness
66. HIV infected person reads scripture	2.41	Low Level of Awareness
67.HIV infected person practices spiritual reframing of stress	2.69	High Level of Awareness
68. HIV infected person practices faith healing	2.59	High Level of Awareness
69. HIV infected person rely more on God than biomedical treatment for healing	2.67	High Level of Awareness
70. HIV infected person has a feeling that one's illness is a punishment from God	2.39	Low Level of Awareness
Overall Mean Score	***2.69***	***High Level of Awareness***

Table 8 illustrates the level of awareness of senior high students about the effects of HIV/AIDS in terms of spiritual, with an overall mean score of 2.69 interpreted as high level of

awareness. This finding implies that the senior high school students were highly aware about the effects of HIV / AIDS in terms of spiritual aspect. The rationale for this is that these students believed that when a person is in crisis, the only savior that they would think of is God or the being spiritually guided. This is why the highest item they chose is about HIV infected person looking for a stronger connection with God. In terms of the lowest item chosen, about HIV infected person having a feeling that one's illness is a punishment from God was last because the senior high school students of PNC believed that illness is not a punishment but something that was created because of the lack of health information and attention. This finding is confirmed by Szaflarski (2012) which defined spirituality as that which gives meaning and purpose to life, is often a central issue for patients at the end of life or those dealing with a chronic illness such as HIV/AIDS.

Szaflarski (2012) also said that spirituality and religion are important to many people living with HIV (PLWH).The author added that spiritual interventions utilizing the power of prayer and meditation and addressing spiritual struggle are under way. Faith-based community interventions have focused on stigma and could improve individual outcomes through access to spiritual/social support and care/treatment for PLWH.

3.4. Is there a Significant Relationship between the Levels of Knowledge on HIV/AIDS and Levels of Awareness about the Effects of HIV/AIDS of Senior High School Students?

Table 9: *Table of Significant Relationship between the Levels of Knowledge on HIV/AIDS and Levels of Awareness about the Effects of HIV/AIDS of Senior High School Students*

	N	Pearson Correlation	Sig. (2-tailed)	Interpretation	Decision
Level of Knowledge on HIV/AIDS and Levels of Awareness about the Effects of HIV/AIDS Of Senior High School Students	369	.549**	.000	Significant Relationship	Reject Ho

Table 9 presents the significant relationship between the levels of knowledge on HIV/AIDS and levels of awareness about the effects of HIV/AIDS of senior high school students.

Data on the table illustrates that there is a significant relationship between the levels of knowledge on HIV/AIDS and levels of awareness about the effects of HIV/AIDS of senior high school students as determine by the sig. value of .000 which is lesser than 0.05 level of significance. This finding indicates that the increase in knowledge (transmission, prevention and protection) on HIV/AIDS of each senior high school student would mean increase in their

awareness about its effects may it be physically, psychologically, socio-economically or spiritually. The essence of this finding entails that knowledge and awareness on HIV/AIDS are very important to control the disease. These are the first steps of preventive strategies that lead to controlling the disease. A very real way that is cheaper and effective than curative ones.

The finding above is similar to the works of Appiah-Agyekum and Suapin (2013) entitled, *"Knowledge and awareness of HIV/AIDS among high school girls in Ghana"* revealed that SHS girls in Ghana generally had adequate knowledge on the basics of HIV/AIDS. Also according to the works of Appiah-Agyekum and Suapin (2013) the universally accepted means of handling the pandemic is prevention. The authors added that prevention of HIV/AIDS aims to reduce the risk of infection by encouraging individuals to make healthy sexual life choices.

To elaborate the findings of the significant relationship between the levels of knowledge on HIV/AIDS and levels of awareness about the effects of HIV/AIDS of senior high school students, Table 10 below shows the table of significant relationships between items from the levels of knowledge on HIV/AIDS in terms of transmission, prevention and protection; and items from the levels of awareness in terms of physical, psychological, socio-economic and spiritual, as determined by the sig. value of: (0.000 for transmission and physical, 0.000 for prevention and physical, 0.000 for protection and physical; 0.000 for transmission and psychological; 0.000 for prevention and psychological, 0.000 for protection and psychological; 0.000 for transmission and socio-economic; 0.000 for prevention and socio-economic, 0.000 for protection and and socio-economic; 0.001 for transmission and spiritual, 0.000 for prevention and spiritual, 0.000 for protection and spiritual) which were all lesser than the 0.05 level of significance.

Table 10 shows that in all aspects of knowing HIV/AIDS (transmission, prevention and protection), the senior high school student-respondents were significantly related to become aware about its effects – physically, psychologically, socio-economically and spiritually.

Moreover, still there are many myths and misconceptions prevalent in the society regarding HIV/AIDS. In this regard, strengthening the student's knowledge and awareness through various strategies like HIV / AIDS Symposiums; Intensive Focused Series of Lectures; Focused Group Discussion (FGD) with Counseling; Testing, and Referral Services; and Film Showing Strategy will help enrich the HIV/AIDS education among the senior high school students and transform them to become leaders before they make major life choices. With more intensive health education, these students will have the courage to create an environment in which HIV/AIDS is not discussed in secrecy and shame, but openly and with compassion. Their

actions coupled with facts about HIV/AIDS and how to prevent it will turn into the development of safety behaviors among teens.

Table 10: *Table of Significant Relationships between the Items in the Level of Knowledge on HIV/AIDS and Levels of Awareness about the Effects of HIV/AIDS of Senior High School Students*

	N	Pearson Correlation	Sig. (2-tailed)	Interpretation	Decision
Level of Knowledge – Transmission and Level of Awareness - Physical	369	.313**	.000	Significant Relationship	Reject Null Hypothesis
Level of Knowledge – Transmission and Level of Awareness - Psychological	369	.329**	.000	Significant Relationship	Reject Null Hypothesis
Level of Knowledge – Transmission and Level of Awareness – Socio-Economic	369	.297**	.000	Significant Relationship	Reject Null Hypothesis
Level of Knowledge – Transmission and Level of Awareness - Spiritual	369	.176**	.001	Significant Relationship	Reject Null Hypothesis
Level of Knowledge – Prevention and Level of Awareness - Physical	369	.457**	.000	Significant Relationship	Reject Null Hypothesis
Level of Knowledge – Prevention and Level of Awareness - Psychological	369	.393**	.000	Significant Relationship	Reject Null Hypothesis
Level of Knowledge – Prevention and Level of Awareness – Socio-Economic	369	.354**	.000	Significant Relationship	Reject Null Hypothesis
Level of Knowledge – Prevention and Level of Awareness - Spiritual	369	.308**	.000	Significant Relationship	Reject Null Hypothesis
Level of Knowledge – Protection and Level of Awareness - Physical	369	.510**	.000	Significant Relationship	Reject Null Hypothesis
Level of Knowledge – Protection and Level of Awareness - Psychological	369	.399**	.000	Significant Relationship	Reject Null Hypothesis
Level of Knowledge – Protection and Level of Awareness – Socio-Economic	369	.484**	.000	Significant Relationship	Reject Null Hypothesis
Level of Knowledge – Protection and Level of Awareness - Spiritual	369	.462**	.000	Significant Relationship	Reject Null Hypothesis

**. Correlation is significant at the 0.01 level (2-tailed).

4. Conclusion

It was concluded that senior high school students-respondents have high levels of knowledge on HIV/AIDS in terms of transmission, prevention and protection; high levels of awareness about the effects of HIV/AIDS in terms of physical, psychological, socio-economic and spiritual; and there is a significant relationship between the levels of knowledge on HIV/AIDS and levels of awareness about the effects of HIV/AIDS of senior high school students.

Future research involving other senior high school students from other schools in different municipalities / locales is also needed to measure the knowledge and awareness on HIV/AIDS for the entire region or country, since the study was limited to assess only 4 schools and only in the municipality of Los Banos Laguna.

5. Recommendation

The study recommended that: 1) senior high school students to be more knowledgeable and aware and updated about HIV/AIDS and that they be involved in school activities for the implementation of the Enhanced Reproductive Health Program; 2) the educators to be equipped

on becoming more conscious on the level of understanding / knowing about HIV /AIDS; 3) parents to approve the use of the Program as part of their children's activities in school; 4) school administration to use the Program to raise the knowledge and awareness specifically on HIV/AIDS of their senior high school students; 5) future researchers to use this study and its output as a reference for similar future endeavors.

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