

HIV Awareness in Nueva Ecija Senior High School in the Background of R.A 11166: Basis for Still Projected Displays

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Abstract

This study entitled HIV Awareness in Nueva Ecija Senior High School in the Background of R.A 11166: Basis for Still-Projected primarily assess the level of awareness of Senior High School students of Nueva Ecija towards HIV. The level of awareness of the respondents are able to be assessed in terms of HIV transmission and acquisition, prevention, practices and treatment of HIV. The respondents of this study were the 389 Senior High School students of Congressional District I of Nueva Ecija, and 75 health care worker/practitioner of Congressional District I. The research method employed in the study was descriptive research design. This method of research is suited to the study as it was intended not only to describe the existing understanding of the learners and health care workers on HIV but also to inquire into the reasons why they have such degree of awareness about HIV. In this research, the sampling technique used was the purposive sampling technique. The two sets of respondents, from the Senior High School students and Health care workers Level of Awareness will be the implications to develop an intervention material such as Still-Projected-Display related to HIV. Based on the findings, it was concluded that Senior High School respondents are Slightly Aware when it comes in assessing their level of awareness in terms of transmission/acquisition, practices, prevention and treatment of HIV. It only means that their knowledge and level of awareness are not enough regarding HIV, the results of their responses mean that they need to have a deeper understanding towards HIV. The result of the responses appeared to be the content of the Still-Projected Display that should serve as an intervention material to addressed the need for further awareness about HIV. Banking on the results, further studies relevant to HIV in connection to the developed intervention material may be translated to Kapampangan dialect once conducted in the future. Since Kapampangan dialect is the neighboring province of Nueva Ecija.

Keywords: Human Immunodeficiency Virus, Still-Projected Displays, transmission, prevention, treatment

INTRODUCTION

Without addressing the problems caused by the Human Immunodeficiency Virus (HIV), no real progress can be made. In previous years, number of HIV cases spikes; one

of the reasons was the lack of proper information about HIV. Some of these are the lack of access to the means in prevention, transmission and treatment of HIV. Our society however also contributes to the stigma of an HIV victim or suspect because of the fear and be embarrassed in public once they tested positive. This stigma can create a mindset that HIV cannot be cured. They are also not aware of the process of HIV treatment that is why they tend to keep it by themselves and refuse to cooperate on the process (WHO, 2021).

In 1994, a national try-out has been developed by the Department of Education Culture and Sports (DECS), this was a print and non-print material on HIV and AIDS for the school year 1993 to 1994. This material consists of cut-outs pictures, posters, talking books, and slides for elementary, and for the secondary level which utilize modules. This material was used to determine the effectiveness of the material for both public and private schools both rural and urban areas in the four regions of the country. The HIV and AIDS material was tried out on different subjects and put into an experiment in different schools. But after the trial, no reports and data were given (pub.med.gov,1994).

In this changing time, the need for HIV information and knowledge should not be over since there is no cure for this disease yet; it can only be treated but not cured. In a statement released through the Prevention Access Campaign, people living with HIV on ART with an undetectable viral load in their blood have a negligible risk of sexual transmission of HIV. Depending on the drugs employed, it may take as long as six months for the viral load to become undetectable. Continued and reliable HIV suppression requires the selection of appropriate agents and excellent adherence to treatment. HIV viral suppression should be monitored to assure both personal health and public health benefits (loveyourself.ph,2012)

According to UNESCO Global Coordinator for HIV and AIDS, Chris Castle, 2018, HIV education can help learners not only develop and maintain safer behaviors, but also reduce stigma and discrimination towards people affected by, and living with HIV. Exploring the mechanisms and machinations of culture, values, beliefs, and relationships of power has become more prominent, and acknowledging that education and health are inextricably linked is now seen as vital. For example, HIV education can help to tackle some of the structural drivers of the epidemic, such as harmful gender norms, which can increase the vulnerability of women and girls.

One of the major lessons learned in AIDS education has been the need to broaden the scope of HIV education and ensure a more open and holistic approach to it. In that respect, largely gone are the early tendencies to teach HIV as a science topic concerned only with the biology of transmission, along with the scare tactics often used to discourage young people from becoming sexually active (UNAIDS, 2014).

This study aims to address the concern for the need of educating the learners as well as the society towards HIV. In this study, the researcher proposed to develop a Still-Projected-Display Material in a form of a comic strip type Instructional Material as an output that will come from the results of the study that will best fit the needs of our learners, health care sector and the community to use as information dissemination to properly educate them about HIV.

METHODS

Research design

The research method employed in the study was descriptive research design. This method of research is suited to the study as it was intended not only to describe the existing

understanding of the learners and health care workers on HIV but also to inquire into the reasons why they have such degree of awareness about HIV. It is appropriate to the study considering its aim of assessing the Awareness of Senior High School students and health care workers of Congressional District I on HIV. The descriptive method is a method in examining the status of a group of humans, an object, condition, a system of thought, or event in the present.

This study was conducted at the Senior High Schools and Public hospitals in Congressional District I, one big school per town during the School Year 2021-2022, and one public hospital per town. Congressional District I is one of the four congressional districts of Nueva Ecija. The district consists of the western municipalities of Aliaga, Cuyapo, Guimba, Licab, Nampicuan, Quezon, Sto. Domingo, Talavera and Zaragoza.

Due to COVID-19 pandemic, safety protocols are being implemented while conducting the research. Online questionnaires using Google form will be given to Senior High School students, while a face-to-face administered survey questionnaire will be given to health care workers.

HIV is a sensitive topic that cannot be understood easily by a person without having prior knowledge or awareness of its transmission, acquiring the virus, prevention, treatment, and care for a person living with HIV. The researcher chose Senior High School students as respondents because they are at the right age to comprehend awareness about HIV. On the part of the Health care workers, they are the front liners who have ideas on how to manage the treatment practices and care for a person living with HIV (PLHIV).

Participants and Sampling

In this research, the sampling technique used was the purposive sampling technique. According to Arikunto (2010), purposive sampling is the process of selecting a sample by taking a subject that is not based on the level or area, but it is taken based on the specific purpose (Arikunto, 2010).

The study involved respondents from nine municipalities in the Division of Nueva Ecija. A total of 389 senior high school students were selected from nine public secondary schools through proportionate sampling based on each school's student population. Talavera Senior High School contributed the largest number of respondents because it had the highest student population, while Nampicuan National High School and Exequiel R. Lina High School had the fewest participants due to their relatively smaller enrollments. This distribution ensured that every participating school was fairly represented according to its population size.

For the healthcare workers, 75 respondents were drawn from district hospitals and rural health units across the same municipalities. The number of participants from each health facility was likewise determined based on the available healthcare workforce in each location. PJG Talavera Annex had the highest number of respondents, reflecting its larger personnel complement, whereas the rural health units in Nampicuan and Quezon had fewer respondents because of their smaller staff populations. This sampling approach provided balanced representation from the different healthcare facilities included in the study.

Before the actual data gathering, the research instruments underwent pilot testing to determine their reliability. Thirty senior high school students answered the 64-item questionnaire through Google Forms, while another group of 30 healthcare workers completed the 27-item questionnaire through face-to-face administration. The healthcare workers were given sufficient time to accomplish the questionnaire due to their work schedules, and the completed forms were collected a few days after distribution.

The pilot test results showed excellent internal consistency for both instruments. The questionnaire for senior high school students obtained a Cronbach's alpha of .981, while the

healthcare workers' questionnaire obtained a Cronbach's alpha of .943. These values indicate that the items consistently measured the intended constructs and that the instruments were appropriate for use in the actual study.

Moreover, all questionnaires from the pilot testing were successfully retrieved and considered valid for analysis. No responses were excluded during data processing, indicating that the participants completed all required items. This confirmed that the survey instruments were clear, understandable, and reliable enough to be used for the main data collection.

The researcher conducted a pre-survey within the nine senior high schools and district hospitals as well as rural health units under Congressional District I. The researcher used the Raosoft sample size calculator to get the number of respondents of Senior High School students and Health Care Workers. For the 389 respondents of senior high school students, they were chosen randomly. While the 75 health care worker respondents of the hospitals in Congressional District I were chosen through purposive sampling.

Purposive sampling or judgmental sampling is used when practical considerations prevent the use of probability sampling. Since sampling errors and biases cannot be computed for this sampling technique, the researcher uses criteria in selecting the subjects of the study (Taherdoost, 2016). The respondents are senior high school students and health care workers of Congressional District I of Nueva Ecija.

The survey questionnaire given to the respondents was validated and approved by the evaluation panel before being subjected to a dry-run.

Instrument

The instrument used in gathering the data was a survey questionnaire. To ensure the validity and reliability of the instrument, the questions were evaluated and approved by the evaluation panel. The researcher consulted the guidance counselor for verification and approval together with her adviser if the questions being asked and answered by the respondents follow ethical concerns and considered the learners' privacy while doing the research study.

The data gathering instruments also underwent content validity from five experts-principals and master teachers. After the instrument was subjected to internal and external validity tests, it was distributed to the respondents for a dry-run to ensure the integrity and consistency of the instrument. The questions answered by the respondents pertain to their Level of Awareness on the transmission, acquisition of HIV virus, prevention, treatment, and the care that they render to a person living with HIV (PLHIV).

To assess further the Level of Awareness of the respondents, a 4-point Likert scale was used as mode of assessment for each instrument. For the instrument answered by senior high school students, follow the following scale: (4) - 3.26-4.00 corresponds to Highly Aware; (3) - 2.51-3.25 is Aware; (2) - 1.76-2.50 is Slightly Aware; and (1) - 1.0-1.75 is Not Aware. For the instrument answered by the health care workers, the following modes of assessment were used: (4) - 3.26-4.00 pertains to Always Practiced; (3) - 2.51-3.25 is Sometimes Practiced; (2) - 1.76-2.50 is Seldom Practiced; and (1) - 1.0-1.75 is Never Practiced.

Since face-to-face classes were not yet possible, the data gathering used Google form to assess the level of awareness of senior high school students while the questionnaire answered by the health care workers was administered personally by the researcher and safety health protocols were implemented strictly.

The majority of the filled-out instruments from the respondents were collected within the day but some were collated after 2-3 days. The collected data were subjected to statistical treatment using SPS Software.

Data collection

In gathering the data, the following procedures were followed; a) literature and studies pertinent to the studies were reviewed; b) research instrument (survey questionnaire) were developed; c) permission from the Schools Division Superintendent of the Department of Education of Nueva Ecija and from the principal of the participating school of Congressional District I to conduct the study was sought; d) ethical considerations were made by the researcher; e) data gathered were subjected to statistical treatment to extract meaning there from, and f) conclusions were drawn and recommendations were made based on the results of the study. These data were collected during the second quarter of the school year 2021-2022.

The researcher observed the following ethical standards, as cited from American Educational Research Association (AERA, 2018) in conducting this study: not to use the researcher's influence over subordinates or others to compel them to participate in the research; be sensitive to the integrity of ongoing institutional activities; and alert appropriate institutional representatives of possible disturbances in such activities which may result from the conduct of the research. Govil (2013) explained that ethical consideration is simply a commitment to honesty. It morally forces a researcher to have respect for the pursuit of truth to do work as carefully and accurately as possible.

The researcher obtained the request letter to all Principal, School Heads and Officer in Charge of the Senior High Schools in the municipalities of Congressional District I of the study. Hospital Administrator and Nurse Supervisor of public hospitals and Rural Health Unit of Congressional District I of Nueva Ecija was also given request letters emphasizing that their participation was voluntary and free of charge. The signature of the immediate supervisor in the request letter meant that they acknowledged their participation in the study, and they understood that their rights were protected (Creswell, 2004). The researcher explained clearly to the subjects that their names would not be disclosed to any outside party with the potential of publication.

Also, the researcher observed research protocols as discussed herein. The data gathered were depended largely on the honesty of the subjects. Personal information of the respondents was treated with utmost confidentiality. Appropriate citation of related literature was followed. Gathered data were handled and stored following the provisions of the Data Privacy Law and such collected data were used strictly only to the study.

Data analysis

In the conduct of the study, the following statistical methods were used;

1. Purposive sampling technique was used by the researcher in choosing the respondents to participate in the study. The instrument to be answered by Senior High School students to assess their Level of Awareness towards HIV, the following range is used to interpret the data.

Weight/ Scale	Mean/Range	Verbal Interpretation
4	3.26-4.0	Highly Aware
3	2.51-3.25	Aware
2	1.76-2.50	Slightly Aware
1	1.0-1.75	Not Aware

2. For the instrument to be answered by the Health Care Workers, the following range was used to interpret the results.

Weight/ Scale	Mean/Range	Verbal Interpretation
4	3.26-4.0	Always Practiced

3	2.51-3.25	Sometimes Practiced
2	1.76-2.50	Seldom Practiced
1	1.0-1.75	Never Practiced

3. The researcher use t-test to interpret and assess if there is a significant difference on the respondents Awareness about HIV, specifically on the Transmission, Acquisition of the virus, Treatment, Prevention and Care for a Person Living with HIV (PLHIV).

4. ANOVA or analysis of variance was used to find out whether the differences between groups of data are statistically significant. It is used to determine if there was any significant difference among the responses from the Senior High School learners, and health care workers about the Level of Awareness of HIV.

5. When the results of the study have been interpreted and analyzed, it will be the basis to develop and proposed an intervention material related to HIV.

RESULTS

Table 1 shows the demographic profile of the respondents in terms of age. The senior high school students' age is comprised of age 16 and above. From the above-mentioned demographic profile of age, majority of the respondents' age is 16-18 which has a frequency of 333. From this age group of respondents, they have the greatest number of responses from this study. According to the Philippine Institute of Developing Studies, 2018, the entry age of learners in Junior High School is typically 12 years of age. While the entry age for Senior High School is typically 16 years old.

In a study made by Kakeman (2022), health care workers demographic information that shows highest frequency is aged 30-40. The study shows that this age group seems to be dedicated in terms of rendering services in their institution. This age group also shows that they choose to stay in their respective working areas.

The primary respondents of this study are the Senior High School Students of Congressional District I. As shown in Table 1, Senior High School Students with the age bracket of 16-18 has the highest percentage and frequency. This age group will contribute a lot in the result of this study since their age is the typical age for a Senior High School Student that is why they had the highest percentage and frequency. Their responses are a prime since the focus of this study is to Assess their HIV Level of Awareness in the Background of R.A 11166.

Health care workers/practitioners, are also associated and their responses will also contribute in the result of this study. Their level of awareness in the treatment and care for a person living with HIV in the hospital setting also be reflected as result of this study. Health care workers/practitioners had been categorized to young, middle-aged, old, and very old. As also shown in Table 1, respondents' age of 31-40 (middle-aged) has the highest frequency of 31 and 41.3 percent. While 41-50 categorized as old has the lowest frequency of 11 and a percentage of 14.7. Middle age health care workers have the highest percentage and frequency because this age had grown a lot in the institution and very much familiar in rendering care and treatment for their patients. This age group still wants to stay and remain in their fields and majority of them are still enjoying their chosen profession.

Table 1. Profile of participants

Senior High School Students	Frequency	Percentage	Health Care Practitioners/Workers	Frequency	Percentage
16-18	333	85.6	21-30 young	18	24.0
19-21	25	6.4	31-40 middle-aged	31	41.3

22 and above	31	8.0	41-50 old	11	14.7
Total	389	100.0	51-60 very old	15	20.0

DISCUSSION

The findings of the study indicate that senior high school students in the First Congressional District of Nueva Ecija generally demonstrated an adequate level of awareness about HIV. They were knowledgeable about the major routes of HIV transmission, particularly through unprotected sexual intercourse and exposure to infected blood. However, the results also revealed several misconceptions regarding HIV transmission through casual physical contact, such as hugging, holding hands, sharing utensils, or using the same toilet. These misconceptions suggest that although HIV information is accessible to students, their understanding of the disease remains incomplete. Similar findings were reported by Ronquillo (2017) and Woldeyohannes et al. (2017), who noted that while adolescents recognize the common modes of HIV transmission, misconceptions about non-transmission routes continue to exist. International studies have likewise emphasized that inaccurate beliefs about casual contact remain one of the major contributors to HIV-related stigma among young people.

In terms of practices and attitudes toward persons living with HIV (PLHIV), the respondents generally expressed respect for the rights of individuals with HIV and believed that they deserve equal opportunities in education and employment. Nevertheless, some responses reflected hesitation in sharing personal belongings or interacting closely with persons living with HIV, indicating that stigma and fear are still present. These findings are consistent with the studies of Nubed and Akoachere (2016) and Saki et al. (2015), which found that although young people are becoming more accepting of PLHIV, discriminatory attitudes continue to exist because of misconceptions about HIV transmission. Similarly, Barua et al. (2014) emphasized that inadequate knowledge contributes to fear and social discrimination, making it more difficult for people living with HIV to seek medical care and social support.

The respondents also demonstrated awareness of HIV treatment, particularly the importance of taking medications and the role of antiretroviral therapy in improving the health of persons living with HIV. However, knowledge about preventive medications, such as pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP), was relatively limited. This finding agrees with reports from the United Nations Thailand (2021), which highlighted that while awareness of HIV treatment has improved globally, many young people remain unfamiliar with modern prevention strategies. Likewise, Bezabhe (2016) stressed that continuous education is necessary to improve public understanding of HIV treatment and medication adherence.

Regarding HIV prevention, the respondents recognized that limiting sexual partners, practicing abstinence, and using condoms correctly are effective preventive measures. However, their overall awareness of HIV prevention was lower than their awareness of HIV transmission and treatment. In particular, many students lacked sufficient knowledge about preventive medications and other evidence-based HIV prevention strategies. This finding supports the work of Williams (2016) and Haile (2017), who found that adolescents often understand traditional prevention methods but have limited knowledge of newer biomedical interventions for HIV prevention.

The findings from healthcare workers presented a different perspective. The respondents consistently reported that infection control protocols, sterilization procedures, use of personal protective equipment, and patient confidentiality were regularly practiced in their respective health facilities. These results are consistent with the recommendations of the Centers for Disease Control and Prevention (2018), which emphasize strict adherence to

standard precautions in preventing occupational exposure to HIV. Likewise, Mohapatra (2017) highlighted that proper sterilization and infection control remain essential components of quality healthcare delivery.

Healthcare workers also demonstrated positive attitudes toward providing care for persons living with HIV by offering emotional support, respecting patients' rights, and maintaining confidentiality. However, some responses suggested that misconceptions and stigma may still exist among a small number of healthcare providers. This finding supports the studies of Dapaah (2016) and Fauk et al. (2017), which reported that although healthcare professionals generally demonstrate professional care toward persons living with HIV, occasional discriminatory attitudes remain a challenge in some healthcare settings. These findings underscore the importance of continuing professional education and values formation among healthcare providers.

Overall, the results of the study demonstrate that both senior high school students and healthcare workers possess a basic understanding of HIV. However, important knowledge gaps remain, particularly regarding HIV prevention strategies, treatment options, and misconceptions about casual transmission. These gaps may contribute to the persistence of stigma and discrimination toward persons living with HIV. The findings therefore support the need for a structured intervention material that provides accurate, evidence-based, and culturally appropriate information to improve HIV awareness and promote more positive attitudes among both students and the community.

Despite the valuable findings of the study, several limitations should be acknowledged. The study was conducted only among selected senior high schools and healthcare facilities in the First Congressional District of Nueva Ecija; therefore, the findings may not be generalized to all students and healthcare workers in the province or the country. The study also relied on self-reported responses, which may have been influenced by social desirability or recall bias. In addition, the cross-sectional design of the study measured respondents' awareness only at one point in time and did not determine changes in knowledge or attitudes after educational interventions. Future studies may include respondents from other provinces, employ mixed-method approaches, and evaluate the long-term effectiveness of the developed intervention material in improving HIV awareness and reducing stigma.

CONCLUSION

Based on the findings of the study, it can be concluded that senior high school students in Nueva Ecija have a generally low level of awareness about HIV. Although many students have basic knowledge of the disease, several misconceptions remain, particularly regarding its transmission through physical contact such as hugging and kissing. The responses also suggest that stigma and discrimination toward people living with HIV continue to exist, as some students still hold negative perceptions about their ability to live normal and productive lives. Likewise, while the students showed some awareness of HIV treatment and prevention, the results indicate that there is still a need to strengthen health education so that they can make informed decisions and protect themselves from the disease. Overall, the findings highlight the importance of developing an intervention material that can provide accurate information, correct misconceptions, and help reduce stigma and discrimination related to HIV transmission, prevention, treatment, and care.

In view of the conclusions drawn from the study, the researcher recommends that the developed intervention material be used by teachers as a supplementary educational resource to improve HIV awareness among senior high school students. Schools may also integrate the material into Learning Action Cell (LAC) sessions and other school-based health

programs to equip teachers with accurate and updated information about HIV. To maximize its impact, the intervention material may be introduced at the district and division levels, particularly in schools located in far-flung communities where access to reliable health information is limited. School administrators are likewise encouraged to utilize still-projected displays and other visual instructional materials as part of their awareness campaigns. In partnership with the education sector, healthcare providers and local health offices may also use the intervention material during community-based information drives to reach individuals who have limited access to technology and online resources. Furthermore, the developed material may serve as a model for future HIV awareness initiatives in both schools and communities. It is also hoped that senior high school students will benefit from the intervention by gaining a better understanding of HIV and developing more positive attitudes toward people living with the disease. Finally, future researchers are encouraged to further validate and improve the intervention material and consider translating it into local dialects, such as Kapampangan, to make it more accessible to learners and community members in neighboring provinces.

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Conflict of interest

The author declares no conflict of interest regarding this manuscript.

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