

**DEVELOPMENT OF LEARNING MODULES ON SEXUALLY
TRANSMITTED DISEASE FOR STUDENT NURSES**

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Paper Received: 25.07.2021 / **Paper Accepted:** 20.08.2021 / **Paper Published:** 27.08.2021**Corresponding Author:** Rosario Charisse R. Venzon; Email: charissevenzon@yahoo.com; doi:10.46360/globus.met.320212007**Abstract**

Background: The Philippines is estimated to have 97,000 cases of HIV, and there were 2,818 newly diagnosed HIV cases in the Philippines during January to March 2020 according to United Nations. The predominant age group of people with HIV has shifted from 25-34 years old on the year 2000-2005 to 15-24-year-old in 2009 wherein from the 17% incidence of 15-24-year-old with HIV, has doubled in the year 2019 with a 29% incidence (HIV/AIDS and Art Registry of the Philippines, 2020) making the country accountable for more than 85% of new HIV infections in the Asia Pacific. The development of learning materials has a direct impact on the nursing students which will serve as a platform to spread awareness about sexually transmitted disease. Nurses are bound to meet challenges in the workplace in their roles as counselors, educators, providers that promote individual health care and create programs that will prevent diseases. As nursing students it necessary to be equipped with the right attitude and beliefs that will promote sexual health. It also requires preventive effort, being advocate of health for the adolescents to prevent sexually transmitted diseases.

Purpose: This study aims to equip the young people especially the student nurses with knowledge, attitude and character to understand the importance of valuing self, preserving wellbeing and dignity. Through this study it will help to describe the effectiveness of learning modules which gives spectrum to educational knowledge, experiential learning that will focus on prevention of sexually transmitted diseases

Methods: The study used methodological tools in learning modules with the specific content mainly about sexually transmitted disease awareness. The content was made simple for better understanding of the participants. Both quantitative and qualitative data in the learning process and the outcome had been collected and analyzed. Van Manen's hermeneutic phenomenological approach was used to analyse and interpret the interview data

Results: The study showed in three main themes mainly assessment and utilization of learning modules for sexually transmitted disease, presentation of case study and structural approach for health promotion, student nurses' recommendation for peer education. Learning materials or modules are essential to educate people, to promote communication, to promote leadership essential to enjoy quality of life

Conclusion: The study aims to develop learning modules that will help to promote awareness about sexually transmitted disease to student nurses. The data suggests that having seminars, trainings and programs are essential in building a stronger community. Authenticity in developing learning materials and facilitate programs that will help to promote knowledge can have greater impact in the prevention of diseases.

Keywords: Learning Module, Nursing Students, Sexually Transmitted Disease.

Introduction

Nursing is a profession that is committed in rendering service. Nurses are bound to meet challenges in the workplace in their roles as counselors, educators, providers that promote individual health care and create programs that will prevent diseases. As nursing students it necessary to be equipped with the right attitude and beliefs that will promote sexual health. It also requires preventive effort, being advocate of health for the adolescents to prevent sexually transmitted diseases.

The Philippines is estimated to have 97,000 cases of HIV, and there were 2,818 newly diagnosed HIV cases in the Philippines during January to March 2020 according to United Nations. The predominant age group of people with HIV has shifted from 25-34 years old on the year 2000-2005 to 15-24-year-old in 2009 wherein from the 17% incidence of 15-24-year-old with HIV, has doubled in the year 2019 with a 29% incidence (HIV/AIDS and Art Registry of the Philippines, 2020) making the country accountable for more than 85% of new HIV infections in the Asia Pacific. A recent study conducted by Kilwein and Looby (2017) emphasizes that adolescents actively engage in sexual activities. Centers for Disease Control and Prevention (2020) claims that many young adults engage in risky sexual attitudes wherein, data shows that lesbians, gays, and bisexuals are now considered to be at substantial risk for serious health outcomes such as HIV, Sexually Transmitted Diseases (STI), and unplanned pregnancies. Examples of these include unprotected intercourse, early sexual activity before the age of 18, having multiple sex partners, engaging in unprotected anal sex, having intercourse with a partner who has been injecting drugs or sharing of needles, and having intercourse with the same sexual orientation (Akumiah, 2020). Previous findings of the Sexual Health Survey show that young adults' pattern of sexual activity is high as they are in the stage of sexual curiosity without knowing the risks and right attitudes which should be associated with the sexual practices. (World Health Organization (2021))

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Nurses play roles in promoting and preventing the transmission of sexually transmitted disease through promoting knowledge and awareness by developing learning modules that will help to explain about sexual practices that will lessen the incidence of contracting STI/ HIV and other complications. The development of learning modules has a direct impact on the nursing students and will serve as a platform to spread awareness about sexually transmitted disease.

Objective

The study aims to equip the young people especially the student nurses with knowledge, attitude and character to understand the importance of valuing self, preserving wellbeing and dignity. As future providers of care student nurses must possess character that will promote respect in social and sexual relationships; being responsible for their own actions on sexual health practices. Through this study it will help to describe the effectiveness of learning modules which give spectrum to educational knowledge, experiential learning that will focus on prevention of sexually transmitted diseases.

Methods

Research Design and Data Collection

The aim of this research was to develop learning modules that describe the effectiveness of learning modules which gives spectrum to educational knowledge, experiential learning that will focus on prevention of sexually transmitted diseases. This is essential to explore the nurse student's perception about sexual practices, their awareness on the issues which the community is facing and may contribute to the acquisition of knowledge about sexual health and to understand its concept.

The methodological tools use learning modules in which the specific content is mainly about sexually transmitted disease awareness. The content was made simple for better understanding of the participants. The strategy has three stages which are: presentation, group discussion and critical analysis. Both quantitative and qualitative data in the learning process and the outcome had been collected and analyzed. There are five professors who are experts in the field assigned to observe and monitor the 140 participants. Then after the pre-test and post-test, the researcher conducted interview to the participant who is willing to participate with informed consent. There are at least 10 participants who participated upon data saturation. The data was analysed through descriptive analysis and presented according to relevant literature gathered.

Module Planning

Creating modules need critical evaluation. It involves designing modules that can be appropriate to learners. In planning, it is necessary to define the problem, addressing the gap that the researcher wants to convey. It also contains objectives which are specific, measurable, attainable, and realistic and time bound. The process of creating an external and internal framework is helpful in establishing course structure. Planning a module is a process that requires time, commitment and a thoughtful, systematic approach that supports your students' learning. (Donnelly, 2005)

Designing Modules of Learning for Sexually Transmitted Disease

In designing a learning module, it must assess and identify the learning needs in order to facilitate strategies that will be effective in learning. The learning theories will serve as framework to create implications that will enhance learning for the student nurses. The set of criteria formulated is also important in creating modules about sexually transmitted disease. Learning outcomes must promote competency of the learner. Case based approach is essential in promoting knowledge like engaging students in specific scenarios that resemble the real life situations. The teacher role is to facilitate while the students analyse and address the problems. Case based learning provides opportunities to understand theory in practice. The exploration is helpful to know the point of view of student nurses and the way they see about sexual practices. Students can also see how a decision will impact different participants, both positively and negatively.

The ASSURE model was developed by Heinrich and Molenda in 1999. It is a well-known instructional design guide using a constructivist perspective which integrates multimedia and technology to enhance the learning environment (Patrick Lefebvre 2006). According to the ASSURE Model of Instructional Design, the designer should follow the important criteria: analyse learner characteristic, state objectives, select strategies and of design materials, utilize materials, require learner response and evaluation.

Evaluating the Learning Materials/Modules

Evaluation is a systematic process by which the worth or value something-in case teaching and learning are judged. (Bastable, 2015). The evaluation will help to elicit information on effectiveness of the module for the students. Evaluation is an integral part of the module development, informing you before, during and after the process. Selection of methods is necessary in evaluating data that you need for improvement.

In developing modules for sexually transmitted disease, the blueprint of the module was prepared ahead of time and evaluated by five professors in the department of nursing. And a moderator was assigned by the department to ensure smooth flow of modules. A speaker is assigned as well to deliver the content of modules. The activity started at 8am and divided into 2 sessions: the morning and

afternoon session. This was participated in by three faculty and 40 nursing students. This morning session is the discussion of module, is followed by the presentation of case based scenario then pretest and post-test is given to assess the impact of module. The second session is about presenting case scenario then conducting interview to the participants with their approval and consent is given.

Table 1: Designing The Module Using Assure Model

Analysis	State Objectives	Selection of Media	Utilization of Materials	Required Learner Performance	Evaluation
The nursing students (learners) Prior knowledge about sexually transmitted disease Learning style Attitude of student	Clear and concise Objectives intended for student nurse is specific Learning conditions	Media must relevant with visual presentation Graphics and presentation Case scenario presentation	Appropriate materials with the use of laptops Online platform was utilized	Critical thinking analysis Case scenario problem solving reflection	Evaluation of the objectives Reflection and sharing of insights Post test

Table 2: Module on Sexually Transmitted Disease

Sexually Transmitted Diseases	Methodology of Teaching
I. Introduction Overview on transmission	Short talks and lecture session
II. Diagnostic and treatment	Lecture
III. Prevention of STD	Lecture
IV. Case presentation	Panel forum

Table 3: Module on Human Immunodeficiency Virus and Acquired Immunodeficiency

HIV/AIDS	Methodology of Teaching
I. Overview	Short talks and lecture session
II. Symptoms	Lecture
III. Diagnosis and Tests	Lecture
IV. Prevention and Risk Factors	Lecture
IV. Management and therapies	Lecture/ open forum
V. Situational analysis	Analysis, open forum

Table 4: Module on Hepatitis B

Hepatitis B	Methodology of Teaching
I. Overview	Short talks and lecture session
II. Symptoms	Lecture
III. Manifestation of AIDS	Lecture and photo demonstration
IV. Diagnosis and Tests	Lecture
V. Prevention and Risk Factors	Lecture
VI. Treatments and Therapies	Lecture
VII. Situational analysis	Lecture/ open discussion Analysis, open forum

Table 5: Teaching Modalities

Teaching Modality	Description
Lecture Photo demonstration	Is a presentation that conveys information that promote body of knowledge.
Video demonstration and power point presentation	This is a collection of images that present the manifestation of diseases. The student nurse will try to describe the clinical condition of the diseases.
Case scenario presentation	Presenting videos that can explain the signs and symptoms of certain sexually transmitted diseases.
Open forum/ discussion	The students will analyse the given scenario and try to analyse the situation. This promotes creative thinking and awareness of the students.
Quiz	The students will interact with the speaker that presents clinical scenarios and challenges of the audience. This will help to relate theories and practices.
	It is used to assess the student learners on particular topic and to assess cognitive and analytical skills of students.

Result

Integrated modular approach to teaching clinically important topics was conceived in order to stimulate the students’ interest in the subject and also to provide a comprehensive view of these skin topics by involving other related departments. The teaching methodology for various topics was also different in order to provide a varied learning experience. (Karthikeyan & Kumar 2014)

Van Manen's hermeneutic phenomenological approach was used to analyze and interpret the interview data. Words, phrases and statements describing the experiences of nurses were highlighted and identified from the interview transcriptions. These statements were isolated thus forming themes reflecting descriptions of the nurses' experiences. All themes that had the similar meaning were grouped together as a thematic category.

Assessment and Utilization of Learning Modules for Sexually Transmitted Disease

A staged process of risk assessment and intervention planning should be considered to maximize the benefits of all relevant approaches (Keller, 2016). Lack of knowledge is one of the reasons in the management of diseases. Sometimes students are not comfortable when discussing some issues like sexual practices that will somehow be reflective of not having sufficient knowledge. Negative attitudes and beliefs may somehow affect the assessment and may require provision of counseling for the individual. It is necessary to assess the learning

needs of participant by creating modules or materials that are essential in promoting knowledge. Educational materials are great tools in providing guidelines, supporting protocols to clarify doubts about certain concepts.

“Nowadays adolescents like us are not knowledgeable about sexually transmitted disease. We usually have fun engaging in relationships. We need someone also who will guide us especially in our decision. I am very glad that there are modules made to create awareness and to be educated about the disease per se”- SN3.

Assessing sexual health, determining the problem, analyzing the problem through suitable nursing initiatives and maintaining sexual health (Kütmeç, 2011). Provided manuals improved health care services and are a way to improve management of diseases and illnesses. This will enable improvement of quality of care that will help in the prevention of sexually transmitted disease and management of cases.

Presentation of Case Study and Structural Approach for Health Promotion

Presentation of real life scenarios and case study will help the students to deepen their knowledge about the disease. This will help to understand the importance of being responsible citizens. Student nurses can be advocates of health in their own community. That is why it is necessary to understand the concepts. Intervention and educational approach will help the community in

spreading awareness. Interventions to address societal-level factors can target the macro level, such as policy change and poverty alleviation, which require long-term efforts (Huanga et.al, 2015). Approaches may vary, like structural approach which focuses on effecting policy or legal changes and changes in the environment to mobilize the people (Huanga et.al, 2015).

“I really love the presentation of sample cases; it enlightens my mind to love and care for me and including my friends as well. It opens my mind about the importance of examination, screening or testing. It helps me to understand also the painful situation of a patient with sexually transmitted disease and I feel pity for them but through this video scenarios presentation it widens my knowledge to promote respect and be a responsible person.” SN-5

The intervention focuses on increasing HIV/STI knowledge, testing and condom use through health education trainings, venue-based testing and condom distribution (China CDC, 2004; Hong et al., 2011). The creation of supportive clinical services, which incorporated respect, concern and relationship building, were essential parts in promoting health. Flexibility and responsiveness plays a major role in the mainstream of outreach program. It gives insight on how a structural approach differs from more traditional outreach approaches that focus more exclusively on HIV/STI-related concerns (Huanga et.al, 2015).

Student Nurse Recommendation for Peer Education

The student nurse feedback plays important roles in facilitating better planning and implementation

about the disease. Sometimes barriers in learning affects a certain program implementation, that’s why, is necessary to put an action to eliminate those barriers in learning. Enhancement of facilitator’s dedication in providing activity materials provide models for goal setting and task completion to help participants achieve success (Meyer et. al, 2014).

“I am very thankful for this session because I learn a lot it gives me opportunity to voice out my insights in promoting health. For me it necessary to be knowledgeable on what is happening around you. Sometimes I’m too insensitive about what happens outside. Now I know that small acts can change. That’s why I do believe that I could speak out to my friends especially those who lack awareness of the importance of being faithful and not engaging in sexual activities and being responsible as well.”- SN2

Peer recommendation helps to tailor intervention; it serves as a big impact to influence other people. Promoting healthy behaviors is essential to improve quality of life. Recommendations on pertinent issues are also essential in spreading awareness, promoting health, communication, leadership and management.

Discussion

Developing materials and right resources will help to address the learning needs. The development of materials addresses the importance of being knowledgeable about certain concepts. The facilitator or the faculty plays a major role in delivering information and encourage participation in educating the society.

Table 6: Average Pre- and Post-Test Scores

Module	Pre-Test (20) (Average %)	Post-Test (20) (Average %)
Sexually Transmitted Disease	5.4	15.5
Human Immunodeficiency Virus and Acquired immunodeficiency Syndrome	7.1	17
Hepatitis B	7.2	16

Sexually transmitted disease, AIDS, Hepatitis B

Learning materials are helpful in educating the students and learning difficulties can be solved by using supplementary materials (Niu, 2020). Motivation is an integral part of teachers in developing Instructional Materials for learners. They have the best capacity to develop a well fit set of instructional materials for the learners for the attainment of each day’s learning competency (Jimenez, 2020). Based on the pre-test and post-test

of the students there is 10.1 increase in the score of sexually transmitted disease, 9.1 percent in HIV/AIDS and 8.8 percent increase in Hepatitis B.

The study presented in table 5 presents various teaching methods that were utilized during workshops. Power point presentation, case scenario presentation helps to facilitate understanding of nursing students. Table 2, 3 and 4 contains module

content that will help to educate the student nurse. Study believes that through repeated exposure to information such as HIV/STI testing and prevention could change attitudes and potentially even change behaviour. (Alison, et. al 2019).

In table 6 it presented the importance of Assessment and utilization of learning modules. The absence of adequate healthcare, a lack of sexual education, and increased engagement in risky health behaviors. (Alison, et. al 2019). The learning material was effective in the delivery of information. The teachers are best at creating and giving supplementary learning materials and have the capacity to fit instructional materials to the learners. (Jiminez, 2020). In table, it describes the presentation of case study and structural approach for health promotion. The study presented the experiences by the patient who had sexually transmitted disease, their fear in disclosing information to health care providers, family, and friends and the feeling of rejection from the society if they will find out. Mistrust has been linked to a number of outcomes, including decreased use of healthcare services, (Alison, et. al 2019). Through this study, it helps the student to understand the real life situations. As future nurses they will have the capacity to build strong foundation as advocates of health. In table, Student nurse recommendation for peer education was the last theme generated. It explains the important role in educating others, being a change agent in health promotion and disease prevention. The voice to influence others and giving insight and opinions is necessary in the success of programs. Having the right approach to clinical scenarios will help the students in providing comprehensive viewpoints on certain topics. (Karthikeyan & Kumar 2014)

Conclusion

The study aims to develop learning modules that will help to promote awareness about sexually transmitted disease to student nurses. The data suggests that having seminars, trainings and programs are essential in building a stronger community. Authenticity in developing learning materials and facilitate programs that will help to promote knowledge can have greater impact in the prevention of diseases. Learning materials or modules are essential to educate people, to promote communication, to promote leadership necessary to enjoy quality of life. Hence, sensitivity and respect promote togetherness in combating diseases and illness. Simplicity and learning will promote knowledge of learners as good foundation embedded in one's character.

Conflict of Interest

The author declares that there are no significant competing financial, professional, or personal interests that might have influenced the performance

or presentation of the work described in this manuscript.

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