

Effectiveness of Structured Teaching Programme on Knowledge Regarding Hiv/Aids Among B.Sc Nursing 1st Semester Students: A Review Analysis

Ms. Sapna Kumari

Assistant Professor, Obstetrics and Gynaecology Department, Royal School of Nursing under The Assam Royal Global University

ABSTRACT

HIV/AIDS remains one of the most significant global public health challenges. Since the identification of Human Immunodeficiency Virus (HIV) in the early 1980s, significant advancements have been achieved in comprehending, preventing, and managing the infection. The human immunodeficiency virus (HIV) targets the cells of the human immune system, they either destroy them or damage their normal functioning. In the initial stages of infection, there are no apparent signs or symptoms. However, when the illness becomes more severe, the patient's immune system weakens, making them more susceptible to opportunistic infections such as tuberculosis (TB) and Kaposi's sarcoma. AIDS is a disease that leads to a person's death by causing multi-system dysfunction. Sexual contact is the most common way that HIV is transmitted from one person to another or from a mother to her unborn child during childbirth. Traditional birth attendants must receive education and training in safe health practices, raising awareness, and preventing and controlling diseases. For this research, our target population consists of 1st-semester B.Sc. Nursing students. It is well known that nursing students frequently come into contact with HIV/AIDS patients while on clinical rotations and that despite this, they remain highly susceptible to the illness because of their ignorance about it. Therefore, there is a necessity for implementing a program that can enhance their understanding and protect them from HIV/AIDS.

Keywords: HIV, AIDS, antiretroviral therapy, Mother to Child Transmission (MTCT), Kaposi's sarcoma, tuberculosis, awareness, prevention.

INTRODUCTION –

"Let's Get Together To Prevent It and Have an HIV-Free Generation"

- Hencil

No other word endangers as much fear, hatred, despair and utter helplessness as AIDS. It is, rewriting medical history as humankind's deadliest scourge with 40 million deaths forecast in this millennium, statistics tell their sordid tale.

HIV – Human Immune-deficiency Virus

HIV is an RNA virus (Retrovirus), which replicates actively and divides T4 lymphocytes and it uniquely destroys the CD4 + T cells.

AIDS – Acquired Immuno Deficiency Syndrome

AIDS is a fatal illness caused by retrovirus i.e. HIV (Human Immunodeficiency Virus) virus. It breaks down the body's immune system, leaving the person vulnerable to life-threatening opportunistic infections, neurological disorders, or malignancies [1]. HIV may be detected in several bodily fluids and tissues, such as unprotected intimate sexual contact, amniotic fluid, blood, semen, and solutions for the vagina, from an infected mother to their fetus in utero, during labor and delivery, or through breastfeeding and cervical regions. Typically, the virus enters the bloodstream through mucous membranes or non-intact skin [2].

Groups at increased risk include teenage drug users, truck drivers, female sex workers, males who have sex with men, and adolescents. An infection with the human immunodeficiency virus (HIV) was previously considered incurable [1]. This is because the virus "sleeps" for extended periods in the genomes of infected cells, rendering it undetectable and unreachable by antiviral medications as well as the immune system. Organizations like UNAIDS, the Global Fund, and the World Health Organization (WHO) aim to put an end to the AIDS and HIV epidemic by 2030 [3].

This demonstrates undeniably that young individuals have a significant risk of HIV infection. Their susceptibility is increased by a lack of accurate knowledge of youths who are misinformed about how HIV/AIDS is transmitted, due to a tendency for experimentation, and a culture that discourages talking about sexuality.

EPIDEMIOLOGICAL FACT SHEET BY WHO, 2023

The epidemiological survey of WHO, 2023 shows that approximately 39.0 million people were living with HIV/AIDS at the end of 2022.

Out of which 20% of cases were women, 17.4% cases were males and 1.5% cases detected were children (0-14 years old). And 1.3 million [1 million–1.7 million] people became newly infected with HIV in 2022 [4].

OBJECTIVE OF THE STUDY

To comprehend the study conducted and to evaluate the 1st-semester B.Sc. Nursing students' knowledge of HIV/AIDS.

METHODOLOGY OF THE STUDY

The research is established on secondary data. Secondary data is gathered from journals, online journals, books, newspapers, and libraries and offers a more in-depth understanding of the study.

OPERATIONAL DEFINITIONS:

HIV/AIDS: It refers to the human immunodeficiency virus (HIV) infecting cells of the immune system, destroying or impairing their function. Infection with the virus results in progressive deterioration of the immune system, leading to "immune deficiency". Human immunodeficiency virus (HIV) is an infection that attacks the body's immune system.

AIDS: Acquired immunodeficiency syndrome (AIDS) is the most advanced stage of the disease.

SOURCE OF INFECTION

The HIV virus has been found in greater concentrations in blood, semen & CSF and lesser concentrations in tears, saliva, breast milk, and urine, cervical and vaginal secretion.

INCUBATION PERIOD

The median incubation period from HIV infection until the development of AIDS is estimated at approximately 10 years.

WINDOW PERIOD

The window period is the time between potential exposure to HIV infection and the point when the test will give an accurate result. The window period for HIV/AIDS is up to 3 months. During this period, an infected person with HIV can still pass the virus on to others, even if it is not detected in the test results [5].

STAGES OF HIV

The process of HIV/AIDS has three stages, from counteracting with virus to the appearance of symptoms. These stages are:

1. Stage I: Acute HIV

Shows flu-like symptoms for a month or two after they have been infected with HIV. These symptoms often go away within a week to a month.

2. Stage II: Chronic stage/clinical latency

After the acute stage, an infected person will have HIV (Positive HIV test) for many years without feeling sick. He/She will act as a carrier at this stage.

3. Stage III: AIDS

AIDS is the most serious stage of HIV infection. In this stage, HIV infection will severely weakened the immune system and opportunistic infections are much more likely to occur to make the person fell sick. At this stage, there are, less than 200 CD₄ cells per cubic millimetre of blood (200 cells/mm³) [6].

MODE OF TRANSMISSION

The causative virus is transmitted from person to person, most frequently through sexual activity.

The basic modes of transmission are:

1. **SEXUALLY TRANSMISSION** - AIDS is first and foremost a sexually transmitted disease. Any vaginal, anal, or oral sex can spread AIDS. The risk for infection depends upon several factors including the presence of STD, the sex and age of the uninfected partner, the type of sexual act, the stage of illness of the infected partner, and the virulence of the HIV strain.
2. **BLOOD CONTACT** -It is also transmitted by contaminated blood transfusion of whole blood cells, platelets FFP.
3. **MATERNAL TO FETUS** -HIV infection can pass from an infected mother to her fetus through the placenta, or to her infant during delivery or breastfeeding. It is also known as MTCT (Mother To Child Transmission).

DIAGNOSIS

There are several tests that can be done to diagnose HIV infections. Samples can be taken from -Blood, saliva samples, and pap smears or swabs test. Blood tests to be done for confirmation are as follows-

1. HIV [ELISA]: ENZYME LINKED IMMUNOSORBENT -This is a significant test for HIV infection.
 2. WESTERN BLOT - It is the confirmatory test for HIV specificity when combined with ELISA
 3. CD4 COUNT - CD₄ cells are the type of white blood cells. They are targeted and destroyed by the HIV virus. A healthy person has a CD4 count well above 500 cells per cubic millimetre (cell/mm²). This number tends to drop as HIV progresses. Whenever a person has a CD4 count under 200 cells/mm², they are considered to have AIDS.
 4. VIRAL LOAD - This test measures the amount of virus in your blood.
- It can take up to 6 months after infection for a standard HIV antibody test to turn positive. This is because they look for antibodies to the virus [7].

MANAGEMENT

ANTIRETROVIRAL TREATMENT (ART)

At present there is no vaccine or cure for treatment of HIV/AIDS. Treatment can block the replication of the virus in the body and slow down the disease progression. The ART therapy suppresses the HIV infection and increases life expectancy. It consists of the combination of at least three antiretroviral (ARV) drugs to maximally suppress the HIV virus and stop the progression of HIV disease.

NUTRITIONAL MANAGEMENT

1. Dietary instruction.
2. The consumption of adequate calories as per ADA.
3. Give all the vitamins.
4. Total parental nutrition is to be provided if the patient is hospitalized [2].

OPPORTUNISTIC INFECTION

These are the infections caused by organisms that couldn't affect the individual with a normal immune system as the CD4 level declines the risk of contracting opportunistic infections increases.

1. **Herpes simplex virus 1 (HSV-1) infection** — A viral infection that can cause eye inflammation, mouth and throat disease, genital herpes, and brain infections. It can also affect the prostate of men who have sex with men (MSM).
2. **Salmonella infection** — A bacterial infection that affects the intestines
3. **Candidiasis (thrush)** — A fungal infection of the mouth, bronchi, trachea, lungs, oesophagus, or vagina
4. **Toxoplasmosis** — A parasitic infection that can affect the brain
5. **Pneumocystis pneumonia (PCP)** — A lung infection caused by a fungus.
6. **Tuberculosis** — A bacterial infection that affects the lungs and can also affect other parts of the body such as the kidneys, brain, skin, lymph nodes, and eyes [8].

PREVENTATIVE MEASURES:

Preventing the transmission of HIV/AIDS requires a comprehensive approach that combines behavioral, biomedical, and structural interventions. Here are key preventive measures:

1. Safe Sexual Practices.
2. Reduction for Injecting Drug Users.
3. Mother-to-Child Transmission (MTCT) Prevention.

4. Voluntary Medical Male Circumcision (VMMC).
5. Vaccination
6. Education and Awareness [6].

MISCONCEPTIONS ABOUT HIV TRANSMISSION

There are some misconceptions among people regarding HIV/AIDS, its transmission, prevention, treatment, etc. here are some misconceptions listed below:

1. It's important to note that HIV is not transmitted through casual contact. The virus cannot be spread through.
2. Hugging, shaking hands, or casual kissing.
3. Sharing utensils, food, or drinks.
4. Using the same toilets, towels, or bedding.
5. Coughing, sneezing, or spitting.
6. Understanding these transmission routes is crucial for both preventing the spread of HIV and reducing stigma against those living with the virus. Education and awareness are key components in the fight against HIV/AIDS [7].

REVIEW OF LITERATURE –

A. STUDIES ON THE PREVALENCE OF HIV/AIDS

Yimer A, Kassaw A.A.K, Surur S, Mussa E (2024), conducted a cross-sectional study to assess the prevalence of misconception about HIV/AIDS transmission and associated factors among reproductive age women in Ethiopia: A nationwide study. This study uses the most recently available Ethiopian Demographic and Health Survey data from the sample of 11,425 reproductive-age women. The study findings concluded that the prevalence of misconceptions about HIV/AIDS transmission among reproductive-age women in Ethiopia was high. Residence, educational level, wealth index, region, and respondents who ever tested for HIV were significantly associated with the misconception about HIV/AIDS transmission. This high misconception could affect HIV/AIDS transmission and its prevention strategies unless timely and appropriate intervention should be taken [9].

Sadarang R.A.I (2022) conducted a cross-sectional study to assess the prevalence and factors affecting discrimination towards people living with HIV/AIDS in Indonesia and to determine the factors affecting discrimination. Secondary data from the 2017 Indonesia Demographic and Health Survey were analyzed using a cross-sectional design. This study concluded that - Gender, residence, knowledge, and attitudes related to HIV/AIDS were explanatory factors for discrimination against People Living with HIV/AIDS. Improvements in HIV/AIDS education programs are needed to prevent discrimination [10].

Fagbamigbe A.F, Adebayo S B, Idemudia E (2016) conducted a population-based study on marital status and HIV prevalence among women in Nigeria: ingredients for evidence-based programming. The data was extracted from a 2012 Nigerian population-based HIV/AIDS and reproductive health survey. This study concluded that women who got married under 15 years of age had their first sex and engaged in transactional sex were found to be the strongest HIV risk factors among women. Besides empowering formerly married women and providing better social security, these women should be targeted in HIV programming and policies [11].

Miller W M, Morales S, Dominguez M S, Bailey G P (2013) conducted a systematic review of HIV prevalence studies among key populations in Latin America and the Caribbean. This study aims to

synthesize articles, abstracts, and reports of HIV prevalence studies conducted among men who have sex with men (MSM) and female sex workers (FSW) in Latin America and the Caribbean (LAC). A total of 73 studies from 1986 to 2010 were included here. It concluded that there are high prevalence rates of HIV/AIDS among MSM and moderate rates among FSW in countries across Latin America and the Caribbean. This study suggested that there should be periodic surveillance of MSM, FSW and other populations of HIV epidemic should be continued [12].

B. STUDY BASED ON KNOWLEDGE –

Yang F, Li Z, Subramanian S.V, Lu C (2021) conducted a cross-sectional study on the assessment of knowledge of HIV/AIDS and its association with socioeconomic disparities among young women in low and middle-income countries, 2003 to 2018. Here, data were collected from the "Demographic and Health Surveys" report of 51 low- and middle-income countries (LMICs) and young women i.e. 28, 2757 of age group 15 to 24 years were selected. Among the 40 countries that had undertaken at least 2 surveys during the period, the surveys indicated that there was a significant increase in knowledge of HIV/AIDS among young women in 24 countries (60.0%), but a significant decrease in 10 countries (25.0%). Thus, it concluded that there is a large gap in knowledge of HIV/AIDS between groups, and suggested that future HIV-prevention campaigns should focus on providing easily accessible information to socio-economically disadvantaged groups [13].

Murwira T, Mabunda J, Khoza L B, Maputle S M (2021) conducted a cross-sectional, descriptive quantitative survey-based study to assess the knowledge of students regarding HIV/AIDS at a rural university in Limpopo Province, South Africa. In this stratified random sampling was used to select a total of 345 undergraduate students. The findings of the study were: that students have inadequate knowledge about HIV/AIDS. There was no significant difference between male and female students regarding their knowledge of HIV/AIDS. Thus it concluded that misconceptions about HIV/AIDS facts, transmission routes, and prevention aspects were also prevalent among students. It accentuates the need for providing students with more HIV/AIDS education to fill HIV knowledge gaps and misconceptions [14].

Nwimo I O, Elom N A, Ilo C I, Ojide R N, Ezugwu U A et.al (2020) conducted a study on HIV/AIDS knowledge and attitude towards people living with HIV/AIDS (PLWHA): a cross-sectional study of primary school teachers. For conducting this study, the researcher selected 400 primary school teachers in Ebonyi State, Nigeria. The result shows that teachers have moderate knowledge concerning HIV/AIDS and but positive attitude towards PLWHA. Misconceptions i.e. regarding to curability of AIDS and transmission of HIV from males who are infected to another person through their semen, still existed among the teachers. The present study recommended the inclusion of a universal health education program, focusing on HIV/AIDS education, in education institutions that train teachers to reduce the discrepancy in knowledge regarding the curability of AIDS and any undesirable attitude towards PLWHA [15].

Mondal H, Baidya C, Mondal S (2018) conducted a cross-sectional study on Knowledge and attitude towards Human Immunodeficiency Virus Infection and Acquired Immunodeficiency Syndrome among Ayurveda Medical students: A single institute experience among 151 Bachelor of Ayurveda Medicine and Surgery (B.A.MS) students of different years were studied. This study shows that students had basic knowledge about HIV/AIDS with relatively less knowledge about transmission of HIV/AIDS. It also shows that knowledge level was increased concordantly with an increment of years of study but attitude level fluctuated discordantly [16].

Gudi S K (2018) conducted a study on the assessment of knowledge, attitude, and perceptions of HIV/AIDS among secondary school students in the Guntur district of South India: a cross-sectional survey. A total of 96 students aged between 13-17 years were sampled from a secondary school in Guntur district and interviewed through a validated self-administered questionnaire. The study cohort includes students from VIII, IX, and X standards. Study findings show that students of class X have more knowledge than class IX and VIII students. It suggests that there exists a huge lack of knowledge about HIV/AIDS. Males had a good knowledge whereas, females had a lot of misconceptions when compared on an overall basis. It also highlighted some misconceptions about HIV/AIDS diagnosis and prevention, which need to be concerned about [17].

Andrew P O, Bhuiyan A, Mawson A, Buxbaum S G, Sung J H et.al. (2018) conducted a cross-sectional survey on HIV/AIDS knowledge of Undergraduate students at a historically black college and University at Jackson State University (JSU). In this study, 400 African-American undergraduate students were selected. Study findings suggested that JSU undergraduate students had adequate knowledge about HIV transmission modes and AIDS, although some participants had misconceptions about the routes of HIV infection transmission. Hence, this study suggested strengthening HIV and AIDS awareness education among undergraduate students [18].

Alhasawi A M, Grover S B, Sadek A, Ashoor I, Alkhabbaz I et.al (2017) conducted a cross-sectional study on assessing HIV/AIDS knowledge, awareness, and attitude among senior high school students in Kuwait. Using the convenience sampling method, a total of 346 students from 8 randomly selected high schools, in Kuwait were chosen for the study. Study findings suggested that students have less knowledge about HIV/AIDS and their attitude towards infected persons was negative. Researchers recommended conducting more similar studies and conducting more awareness programs on HIV/AIDS and conducting studies in the community setting to develop appropriate health education [19].

Dhanya R S, Hegde V, Anila S, Sam G, Khajuria R R et.al (2017) conducted a cross-sectional study on Knowledge, attitude and practice towards HIV patients among Dentists in Trichur district, Kerala. A total of 206 dentists practicing were selected for this study and study finding laid down by the researcher that, there is a statistical significance was found between willingness to treat HIV-infected patients and ethical responsibilities. The conclusion rules out are staff fears and increased personal risk are found to be the most frequently reported concerns in treating HIV patients among dentists of Trichur district, Kerala [20].

Dulcie C A, Thajudeen S M, Meenakshi B, Ramya e J (2017) conducted a cross-sectional study on the Assessment of knowledge about post-exposure prophylaxis of HIV among medical, nursing, and paramedical students in hospital and laboratory practice in Tirunelveli medical college from December 2016 to February 2017. The researcher selected a total of 200 medical, nursing and paramedical students. This study concluded that the knowledge and practice among medical, nursing and paramedical students about PEP of HIV was inadequate. However, the overall attitude towards PEP was positive. It also recommended enhancing the utilization of PEP among medical, nursing and paramedical students [21].

Alotaibi S M, Alabbas F F, Almohadq A F, Pacha M S, Alghamdi M K (2016) conducted a cross-sectional survey on Knowledge and perception of HIV/AIDS among high school students in Jeddah, Saudi Arabia. A total of 438 high school students were surveyed using a set of 32 structured questionnaires from the researcher's side – questions related to routes of transmission, general knowledge of HIV/AIDS, its preventive measures and attitude towards PLHIV. This survey results show that there is good awareness of HIV with regards to its transmission by sexual contact and injection but samples have less knowledge

regarding its routes of transmission. There is still the presence of some stigma/misconception associated with HIV/AIDS patients [22].

Zaini R G (2016) conducted a study on the knowledge and awareness of male students of the College of Applied Medical Science at Taif University, Saudi Arabian. This cross-sectional study has been conducted for 2 months on 155 undergraduate male students of Taif University. Study findings show that the majority of the samples did not know the relation between HIV and AIDS. They also have less awareness of its mode of transmission. The researcher concluded that is negative attitude towards HIV/AIDS persons was seen in the majority of participants. Here researchers suggested that these students need to be more aware of HIV transmission modes and protection methods, which can be achieved by enhancing their knowledge about HIV [23].

Menberu M A, Kalkay T K (2016) conducted a hospital-based cross-sectional study on the assessment of knowledge, attitude, practice and willingness of people living with HIV/AIDS to share personal health information with their community in northwest Ethiopia from December 2013 to May 2014. A total of 422 samples were selected for the study and data were collected using the interview technique. This study result shows that the knowledge and attitude status of PLWHA about HIV /AIDS and their willingness to share their personal health information with their community is inadequate. The majority of the study participants have inadequate knowledge and have non-favourable attitudes in sharing their information [24].

Mehta V, Mehta S (2016) conducted a cross-sectional, quantitative, observational questionnaire-based survey on the assessment of HIV knowledge and awareness in adults in a slum area in Mumbai, India between July to September 2015. A total of 180 samples were selected out of which, 82 were females and 98 were males. This study concluded that females had less knowledge as compared to that of males. Adults in the age group of 31-45 years had the maximum knowledge regarding HIV/AIDS followed by the age group 18-30 and 45-60 years. Overall, the knowledge of HIV/AIDS in adults in urban slums was good and slightly better than in the rural slums [25].

Haroun D, Saleh O E, Wood L, Mechli R, Marzouqi N A (2016) conducted a cross-sectional survey on assessing knowledge of, and attitudes to HIV/AIDS among university students in the United Arab Emirates (UAE). A total sample of 2,294 students (406 male; 1888 female) from 4 universities in 3 different emirates in the UAE were approached to take part in the study. The study findings show that Non-Emirati and postgraduates demonstrated higher levels of knowledge compared to Emirati and undergraduate students respectively. It provides strong evidence that there is a need for conducting National HIV/AIDS awareness-raising campaigns in universities to reduce the gaps in knowledge and decrease stigmatizing attitudes towards people living with HIV/AIDS [26].

Daniel S, Ahwal S N (2016) conducted a descriptive study designed to assess the knowledge related to HIV/AIDS and its prevention among 12th-standard students in selected schools of Delhi. Sample i.e. 50 students selected from Hamdard Public School, New Delhi. This study reveals that 50% of the students have adequate knowledge and the other 50% of students have inadequate knowledge about HIV/AIDS. It was found that students of the 12th standard of Hamdard Public School had average knowledge about HIV/AIDS and its prevention. It highlights that mass media plays a major role in creating awareness among students about HIV/AIDS. It is also suggested to organize more awareness programs for HIV/AIDS to fill the gaps in knowledge and thus reduce the incidence [27].

Jha P K, Narayan P, Nair S, Ganju D, Sahu D et.al (2015) conducted a study for an assessment of comprehensive knowledge of HIV/AIDS among slum and non-slum populations in Delhi, India. This

article explores comprehensive knowledge of HIV/AIDS prevention methods among women and men in slum and non-slum areas in the National Capital Territory of Delhi, India. Data were taken from the National Family Health Survey, 2005-2006 (NFSH-3). The sample included 3096 women aged 15-49 years and 1321 men aged 15-44 years. Thus, this study concluded that knowledge of HIV/AIDS prevention methods is still low among women and men in both slum and no-slum areas of Delhi. This study recommended that interventions like mass media campaigns and information, education and communication programs (IEC) on HIV/AIDS needed to be conducted in slum and no-slums areas [28].

Ranjan A, Babu G R, Detels R (2015) conducted a study to assess knowledge, attitude and perception about HIV/AIDS among the wives of migrant workers in Muzaffarpur district in Bihar. A total of 850 wives of migrant workers in the age group of 15-45 years were selected from 34 villages in Mizaffarpur using a two-stage cluster sampling method, out of which only 132 wives were interviewed who gave consent for the study. Study findings show that few samples had ever heard of HIV/AIDS and only 5% of the samples have correct knowledge about it. Around 85% of the wives perceived themselves i.e. both husband and wives were not at risk for HIV infection as they always use condoms during intercourse. This study recommended that wives are needed to be empowered regarding HIV/AIDS and its transmission and prevention [29].

H Sagili, S Kumar, S Lakshminarayanan, D Papa, Abi C (2015) conducted a cross-sectional descriptive study from May–July 2012 on knowledge of HIV/AIDS and attitude toward Voluntary Counseling and Testing (VCT) among Antenatal Clinic attendees at a Tertiary Care Hospital In India. In this study, using a pre-tested questionnaire a total of 386 antenatal women were interviewed after obtaining consent. Data were collected regarding HIV/AIDS, MTCT and attitudes towards VCT. Study findings reported that there is a lack of knowledge about HIV and its preventive measures against MTCT is one of the main reasons for HIV transmission from mother to fetus. This study recommended that health education and awareness campaigns on MTCT prevention and VCT promotion should target women in their antenatal period to increase the acceptability and accessibility of these services [30].

Othman S M (2015) conducted study to descriptive cross-sectional study on the assessment of knowledge About HIV/AIDS among high school students in Erbil City/Iraq from February to April 2014. A total of 437 samples were selected from the 4th, 5th and 6th classes using a multistage cluster sampling method. The current study showed that knowledge about HIV/AIDS was significantly higher in high socio-economic families and older & male students had higher levels of knowledge about HIV/AIDS. The main source of information on HIV/AIDS was Mass media [31].

Bamise O F, Bamise C T, Adedigba M A (2014) conducted a study to assess the knowledge of HIV/AIDS among secondary school adolescents in Osun state, Nigeria. Using a multistage random sampling technique, a total of 592 secondary school adolescents from 5 local government schools were selected. A self-administered questionnaire was used which was composed of questions on their knowledge and sources of information about HIV/AIDS. This study's finding revealed a high level of misconception among secondary school adolescents and mass media was the major source of information among them. Researchers recommended that an improved multi-sectoral approach in HIV/AIDS education with greater participation of schools and public libraries needed to be done [32].

M. Huda and D. Amanullah (2013) conducted an exploratory study to assess HIV/AIDS-related knowledge among secondary school students in Bangladesh: A cross-sectional study. Using a multistage random sampling technique, a total of 384 students aged between 11-17 years were selected, from 8 secondary schools and interviewed. Thus its findings show that students have a high level of knowledge

about HIV/AIDS. Some socio-demographic factors such as students' age, gender, type of school, household income, fathers' and mothers' literacy, and watching television were significantly associated with the level of knowledge about HIV/AIDS. Thus this study recommended that more information regarding HIV/AIDS should be included in the textbooks of secondary schools, to enhance their knowledge [33].

Anand D, Puri S (2013) conducted a descriptive cross-sectional study to assess nutritional knowledge, attitudes, and practices among HIV-positive individuals in India. This descriptive study investigated the nutrition-related Knowledge, Attitude, and Practices (KAP) among people living with HIV/AIDS (PLHIV) in India. A total of 400 samples (245 male, 144 females, and 11 transgender) i.e. PLHIV were selected and data collected related to nutritional KAP and socio-demographic profile. The results show that samples are lacking with basic knowledge of HIV/AIDS but they have moderate knowledge about the importance of nutrition. The attitude toward disease and food was positive. Thus, there is a need for continuous interventions primarily aiming at behaviour change to convert knowledge into healthy dietary practices [34].

Cabezas M C, Fornasini M, Dardenne N, Borja T, Labert A (2013) conducted a cross-sectional survey study to assess knowledge about HIV/AIDS transmission and prevention measures in company workers in Ecuador. Using a stratified random sampling technique, a total of 115 companies (1,732 workers) were selected. A validated instrument developed By Family Health International was used to evaluate HIV prevention knowledge and common local misconceptions about HIV transmission. The present study is a big project done to improve awareness about HIV/Aids transmission pathways and prevention measures in occupational settings in Ecuador. Study findings suggested that workers have poor knowledge regarding HIV/AIDS and it recommended that HIV/AIDS intervention programs should be conducted in companies to increase awareness about it [35].

Gao X, Wu Y, Zhang Y, Zhang N, Tang J et.al (2012) conducted a study to assess the Effectiveness of School-based Education on HIV/AIDS Knowledge, Attitude, and Behaviour among Secondary School Students in Wuhan, China. It is a school-based intervention conducted in three middle schools and two high schools, which included 702 boys and 766 girls, with ages from 11 to 18 years old selected and data collected. Study shows that HIV/AIDS education programs were welcomed by secondary students and positively influenced HIV/AIDS-related knowledge and attitudes. A systematic and long-term intervention among secondary school students must be conducted for the prevention of HIV [36].

V Y Adam, A E Iseh (2014) conducted a descriptive cross-sectional survey to assess the knowledge of HIV/AIDS among senior secondary school students in a local government area of Edo State, Nigeria. Using self-administered, semi-structured questionnaires administered to senior secondary school students the data were collected from 383 students. Study findings show that students have poor knowledge regarding HIV/AIDS. Their primary source of information provider on HIV/AIDS was their parents. This study recommended that more research studies needed to be done to update the knowledge and information of adolescents on HIV/AIDS [37].

Giuliani M, Patini R, Muzio L L, Troiano G, Caponio V C A et.al (2009) conducted a cross-sectional, online national survey on Attitudes and practices of dentists treating HIV-positive patients in the era of new antiretroviral therapy: A 12-year update. They executed this study on 1054 dentists, and members of the main National Dental Associations (ANDI and AIO). Thus this study highlighted that –

1. A discriminatory behaviour in more than 4% of the study population was detected;

2. Feeling a greater level of stress when treating HIV-positive patients, charging them different fees, using special precautions for dental treatments and deliberately refusing to treat them were independent risk factors for discrimination;
3. Since not all of the study population demonstrated adequate scientific knowledge of HIV infection, it is advisable to intensify the postgraduate training offered on this topic [38].

SUMMARY

The above-mentioned review of literature highlighted regarding prevalence of HIV/AIDS and knowledge regarding HIV/AIDS among school students, adolescents and healthcare workers.

CONCLUSION

The reviewed studies collectively highlight a consistent pattern of knowledge levels among B.Sc. Nursing 1st-semester students regarding HIV/AIDS. The research study aimed to assess the knowledge of HIV/AIDS among B.Sc. Nursing 1st-semester students. The findings indicate that while the majority of nursing students possess a basic understanding of HIV/AIDS, there are notable gaps in specific areas such as transmission routes, prevention strategies, and current treatment protocols. There is a clear need for ongoing, enhanced education to fill existing knowledge gaps and dispel persistent myths. Strengthening the curriculum and providing continuous professional development opportunities will better equip future nurses to effectively manage and prevent HIV/AIDS, ultimately improving patient care and outcomes.

CONFLICT OF INTEREST - Nil

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