CHAPTER – II

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

In this chapter researches related to the present study are reviewed before undertaking the study of the present problem, it was useful to refer to the previous investigations, conducted in the related area of the present research. Review of related literature is of great importance to any researcher. In the words of Bory (1965) “the literature in any field forms the foundation upon which the future work will be built”. The review of related literature is an essential aspect of a research report. It enables to sound foundation for any researcher. It helps the researcher to find out what is already known, and what others have attempted to find out. Review of related literature helps a researcher to define his position not only with reference to problem that he wishes to tackle but also relating to field.

The studies reviewed are presented under the following heads:

2.2 Studies on HIV-AIDS
2.3 Studies on Knowledge of HIV-AIDS
2.4 Studies on HIV-AIDS Awareness
2.5 Studies on HIV-AIDS Education
2.6 Studies on HIV-AIDS Education Implementation
2.7 Studies on Sex Education

These studies are taken from various publications like research, surveys, research abstracts, periodicals, magazines and other reading materials.
2.2 STUDIES ON HIV-AIDS

Khan, M.A. (1992)\(^9\) conducted a study on “Psycho-social aspects of HIV infection and AIDS in multiple transfused thalassemic children”. Two hundred and three multi-transfused children with thalassemia attending the thalassemia clinic of the Charak Palika Hospital, New Delhi were screened for human immuno-deficiency virus (HIV) antibodies by ELISA test. All positive cases were confirmed by the Western blot test. The 203 children screened, 17 (8.37%) were HIV seropositive and the other 3 children referred to the All Indian Institute Medical Science (AIIMS) were from neighbouring states. These children were compared with 20 age matched HIV negative thalassemics as controls. The 20 HIV positive children, four were diagnosed to have clinical AIDS according to the WHO criteria. The clinical features were similar to those described in pediatric AIDS from other parts of the world. This paper describes the clinical features, behavioural problems, cognitive functions and developmental milestones of the children with AIDS.

Bharat, S. (1999)\(^10\) conducted a study on “Facing the challenge: Household responses to HIV/AIDS in Mumbai, India”. How households and families respond to AIDS is of fundamental importance when it comes to designing Programmes and interventions to provide support and care to people living with HIV disease. Where household and family responses are negative, different kinds of interventions may be needed from those where responses are more supportive. This study reports on findings from an in-depth study of household and family responses to HIV and AIDS in India. Using individual and couple interviews, data was collected on the ways in which care and support were offered to people living with HIV and AIDS. Findings was show that responses are greatly influenced by prevailing gender relations, with

\(^9\) www.ncbi.nlm.nih.gov/pubmed/1452260
\(^10\) www.ncbi.nlm.nih.gov/pubmed/10434981
men being responded to more positively than women, as well as other variables such as social status. The quality of responses is also influenced by pre-existing patterns of support and discord within the family. Where trust is high and spousal conflict slight, for example, HIV and AIDS are reacted to more positively than when there is mistrust and inter-spousal conflict. Suggestions are made concerning Programme and intervention development so as to strengthen existing responses, and to maximize the success of home-based care.

Jane T. Bertrand et al. (2006)\textsuperscript{11} conducted a studied on “Systematic review of the effectiveness of mass communication programmes to change HIV/AIDS-related behaviours in developing countries”. The study were systematically examined the effectiveness of 24 mass media interventions on changing human immuno deficiency virus (HIV)-related knowledge, attitudes and behaviours. The intervention studies were published from 1990 through 2004, reported data from developing countries and compared outcomes using (i) pre- and post-intervention data, (ii) treatment versus control (comparison) groups or (iii) post-intervention data across levels of exposure. The most frequently reported outcomes were condom use (17 studies) and knowledge of modes of HIV transmission (15), followed by reduction in high-risk sexual behaviour (eight), perceived risk of contracting HIV/Acquired Immuno Deficiency Syndrome (AIDS), interpersonal communication about AIDS or condom use (six) self-efficacy to negotiate condom use (four) and abstaining from sexual relations (three). The results yielded mixed results, and where statistically significant, the effect size was small to moderate. On two of the seven outcomes, at least half of the studies did show a positive impact of the mass media: knowledge of HIV transmission and reduction in high-risk sexual behaviour. Further

\textsuperscript{11} her.oxfordjournals.org/content/21/4/567.abstract
rigorous evaluation on comprehensive programmes is required to provide a more definitive answer to the question of media effects on HIV/AIDS-related behaviour in developing countries.

Farid-ul-Hasnain S. and Johansson E. Krantz (2006)\textsuperscript{12} conducted a study on “What do young adults know about the HIV-AIDS epidemic? Findings from a population based study in Karachi”. The study investigated Pakistan young adults knowledge and awareness of HIV-AIDS disease. HIV-AIDS is spreading globally hitting the younger generations. In Pakistan the prevalence of HIV in high risk sub populations is five percent or higher. They pose a serious threat of a generalized epidemic especially among the younger population. In the wake of HIV-AIDS epidemic this is worrying as a well informed younger generation is crucial in restricting the spread of this epidemic.

Anthony J. Brown (2007)\textsuperscript{13} conducted ‘Many people don’t think AIDS is fatal: survey’ (New York) The researchers conducted a survey in United States (US), United Kingdom (UK), Russia, France, China, India, Mexico and South Africa. The significance of the survey lies in its exclusive focus on issues related to AIDS its span of nine countries and fact that it poses frank, specific question. More than 40% of respondents did not understand that AIDS is always a fatal disease. However education seems to help in the UK people with a higher education were more likely than those lacking a college degree to believe that most people with HIV go untreated. The findings highlighted the prejudice fear and stigma that surround AIDS. The study conducted that almost half of respondents said they feel uncomfortable to interact with an HIV infected person. The most important message for those who are providing services are that they have to serve as role models in their interactions with

\textsuperscript{12} Dl.tufts.edu/file_assets:UAO84.87751386
\textsuperscript{13} www.reuters.com(article/.../us-aids-survey-1USCOL34913920071113
individuals who are at risk or who are living with HIV. That would go a long way to reducing stigma in society.

Kanniappan S. et al. (2008)\textsuperscript{14} conducted a studied on “Desire for motherhood: exploring HIV-positive women’s desires, intentions and decision-making in attaining motherhood” With access to Prevention of Parent-To-Child Transmission (PPTCT) and Anti Retro Viral therapy (ARV), people living with HIV/AIDS are better able to consider childbearing and parenthood. However, there is limited understanding of the reproductive healthcare needs and the impact of infection on the fertility desires of women living with HIV/AIDS. Research on the relationship between fertility and HIV/AIDS has been largely clinical, focusing on the ability of Women Living with HIV/AIDS (WLHA) to conceive or their pregnancy outcomes. This study describes the findings of a qualitative study undertaken in Namakkal district, Tamil Nadu, India that aimed to explore fertility desires, intentions and fertility decision-making in WLHA and the barriers they face in fulfilling these desires. In-depth interviews were held with selected 43 currently married WLHA aged 18–35 years and 10 key informants. The women were classified according to whether or not they had living children and, within that, whether they had experienced abortion, wanted more or any children or were pregnant. The main factors distinguishing women who wanted to have a child and those who did not were their levels of anxiety about the future and available family support. Women who indicated that they did not have family support and were stigmatised by the family were reluctant to option for a pregnancy as they were not sure of the future, including child care in event of parental death. In contrast, those women who decided to have a child did so based on family support, especially when family members offered to take care

\textsuperscript{14} www.ncbi.nlm.nih.gov/pubmed/18576164
of the child in the future in the event of parental death. Awareness and access to PPTCT and ARV was another key factor guiding the final decision on child bearing. Findings highlight the need for further research on issues faced by WLHA in fulfilling their fertility desires and intentions and for Programmes that both enable WLHA to exercise informed choice in meeting their fertility desires and sensitise healthcare providers about these needs.

Anish P. et al. (2010) took up a study on “Stigma in the HIV/AIDS epidemic: A review of the literature and recommendations for the way forward”. Although stigma is considered a major barrier to effective responses to the HIV/AIDS epidemic, stigma reduction efforts are relegated to the bottom of AIDS programme priorities. The complexity of HIV/AIDS related stigma is often cited as a primary reason for the limited response to this pervasive phenomenon. In this paper, we systematically review the scientific literature on HIV/AIDS related stigma to document the current state of research, identify gaps in the available evidence, and highlight promising strategies to address stigma. They focus on the following key challenges: defining, measuring, and reducing HIV/AIDS related stigma as well as assessing the impact of stigma on the effectiveness of HIV prevention and treatment programmes. Based on the literature, we conclude by offering a set of recommendations that may represent important next steps in a multifaceted response to stigma in the HIV/AIDS epidemic. In April 2007, they searched Pumped for all published articles pertaining to HIV/AIDS related stigma. To perform as broad a search as possible, we utilized the search term “HIV and Stigma”. The study team reviewed each of the abstracts identified. Data extracted from each abstract included

15 www.ncbi.nlm.nih.gov/PMC
the study’s objective, methodology, and key findings. The geographic region of the study was also recorded. The study team then developed a set of mutually exclusive.

Sarah MacCarthy, et al. (2014) conducted a study on “Quality, not just quantity: Lessons learned from HIV testing in Salvador, Brazil”. They have demonstrated that an early HIV diagnosis is a critical first step towards continued engagement in care. They examined HIV testing experiences in Salvador, Brazil, to understand how a focus on quality services can inform service provision more generally in the post–2015 global health agenda. Seventeen semi-structured interviews were conducted with HIV-positive pregnant women in Salvador, a large urban centre of north-east Brazil. Interviews were transcribed, translated and coded for analysis. Deductive codes confirmed factors identified in the literature review. Inductive codes highlighted new factors emerging from the initial coding. ‘Quality’ was defined according to global and national guidelines as HIV testing with informed and voluntary consent, counselling and confidentiality (3Cs). No pregnant woman experienced all elements of the 3Cs. Three women did not experience any informed and voluntary consent, counselling or confidentiality. Few women provided consent overall and none received pre-test counselling. Post-test counselling and confidentiality of services were more consistently provided. This study suggests that testing in Salvador – the third-largest city in the country – is not of the quality called for by global and national guidelines, despite the fact that HIV testing is being routinely provided for HIV-positive pregnant women in Brazil. Going forward, additional clarity around the 3Cs is necessary to improve how the quality, not just the quantity, of HIV service is measured.

16 www.rand.org>about>PolicyExpert>M
Zhiyong Shen Chen Zhang et al. (2014)\(^\text{17}\) conducted a study on “HIV-related behavioural risk factors among older female sex workers in Guangxi, China”. Previous literature suggests a high rate of HIV infections among older Female Sex Workers (FSWs) in China. However, limited data are available regarding HIV- related behavioural risk factors among this population. In the current study, we aim to examine the demographic and behavioural factors that place older FSWs at a high risk of HIV infection. We conducted secondary analysis of the 2010 National Sentinel Surveillance (NSS) data from Guangxi, China. A self-administered, standard behavioural surveillance survey was completed by a total of 12,622 FSWs in Guangxi, China. The Guangxi 2010 NSS sample included 19.4% FSWs aged 35 years or older. The overall HIV prevalence was 1.0% for the entire sample with 2.0% among older FSWs and 0.8% among younger ones. Older age was an independent predictor of unprotected sex, injection drug use, and a self-reported history of syphilis infection. Future HIV prevention interventions targeting FSWs should consider older FSWs’ vulnerable status. Efforts are needed to address their financial needs and invest in skills for socio-economic empowerment.

Heleen French, et al. (2014)\(^\text{18}\) took up a study on “Experiences of people living with HIV and people living close to them of a comprehensive HIV stigma reduction community intervention in an urban and a rural setting”. The study aimed at gaining a deeper understanding of the experiences of People Living With HIV (PLWH) and people living close to them from six designated groups during and after having undergone a comprehensive HIV stigma reduction community intervention in both an urban and a rural setting. Attention was focused on their expressed experiences of the workshop and projects executed. A qualitative interpretive

\(^{17}\)www.tandfonline.com/doi/pdf/10-1080/095401212014.913764

\(^{18}\)www.agol.into/index.php/saharaj/article/ViewFile/08598/98397
description approach was used. PLWH as participants were selected through purposive voluntary sampling and through snowball sampling for the people living close to them. Recruitment was from both urban and rural settings in the North West Province, South Africa. Data collection was via in-depth interviews with 23 PLWH and 60 people living close to them from specific designated groups. The data were thematically analyzed through manual open coding. The results from the urban and rural settings were pooled, as there were no noteworthy differences in the themes between them. The results indicated that there was an increase in knowledge in all the groups, as well as experiences of enhanced relationships and of being equipped with leadership skills in order to go out into the community and being part of HIV stigma reduction actions. The intervention in its comprehensive nature was found to have been successful and promising for future use in reducing HIV stigma.

Steady Mushayabasa (2014)\textsuperscript{19} conducted a study on ‘On the role of HIV/AIDS support groups on combating new infections’ Mathematical model have become invaluable management for epidemiologists, both shedding light on mechanisms underlying observed dynamics as well as making quantitative predictions on the effectiveness of different control measures. Here, we propose a deterministic HIV model that incorporates HIV counseling and support groups. After qualitative analysis the model is extended to incorporate optimal control theory. The objective function minimizes the population of infectious individuals unaware of their HIV status and infectious individuals aware of their HIV status but are reluctant to completely desist from risk sexual activities. The optimal control is characterized and solved numerically for several cases. Qualitative analysis of the proposed model show that voluntary HIV testing and HIV/AIDS support groups have a positive impact on

\textsuperscript{19} www.researchgate.net/profile/Steady_Mushayabasa/Publications
effective control or elimination of the disease. It is shown that in the presence of time dependent HIV testing and support groups more reduction of new infections are achieved. For instance, if more effort and resource are availed on voluntary HIV testing than on support groups, then after a period of twenty years then the population of individuals unaware of their HIV status will decrease by more than fifty percent.

Imran Ahmed Syed, et al. (2014) conducted a study on “Adverse drug reactions and quality of life in HIV/AIDS patients: Advocacy on valuation and role of pharmacovigilance in developing countries”. Evolution of ART treatment of HIV/AIDS presents challenges for patients and health-care professionals, and thus measures of Quality Of Life (QOL) is imperative to maximize outcomes. Similar to other chronic illnesses, HIV patients face challenges in adherence to their medications and experience side effects affecting their overall well-being, a primary outcome of HIV/AIDS treatment. Adverse Drug Reactions (ADRs) are widely accepted as one of the most significant factors affecting the treatment outcomes which often pose negative impact on patients’ quality of life. This becomes more evident in the treatment of chronic illnesses such as HIV and AIDS, where ADRs are often accountable for issues like non-adherence, which may not only affect the patients’ confidence on ARVs but can eventually affect the whole outcome of the treatment. They found that is no doubt about the effectiveness of interdisciplinary approach in managing chronic illnesses and a greater role of pharmacist is regarded as one of the key factors in optimizing drug treatment and handling issues related to drug therapy. However disparities among developed and developing health care system is posing challenges in handling medication related issues in developing world. Indeed, to use medications effectively, they need to understand more precisely the realities of

20 scholar.google.co.in/citations?user=2E/eduMAAAAJ&hl=G

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toxicity and the effect of these toxicities on clinical outcomes. Pharmacists are well known for their importance and effectiveness in optimizing medication therapy which in turns impact positively on patients’ quality of life.

2.3 STUDIES ON KNOWLEDGE OF HIV-AIDS

Illinois State Board of Education, Department of Planning, Research and Evaluation (1990)^21 conducted a study on “What Ninth grades know about AIDS” 181 students of Ninth grade to assess their knowledge, attitudes, and beliefs concerning Acquired Immune Deficiency Syndrome (AIDS). Findings from the 1990 survey are described and comparisons are made with findings from the 1989 survey, and also between Illinois ninth grader data and data collected for adults nationally by the National Center for Health Statistics. Data analysis and reported findings focus on variations according to student gender, ethnicity, and geographic region of the state in: (1) level of knowledge about AIDS; (2) attitudes toward AIDS; and (3) student awareness of information sources and where to get tested for AIDS. findings suggest that ninth graders are knowledgeable about the major means of transmitting the AIDS virus (sexual intercourse and the sharing of hypodermic needles) and about important prevention measures, but they had misconceptions about transmission of AIDS through blood transfer, along with unfounded and potentially destructive phobias about going to school with a student who has AIDS. Based on these findings, recommendations for Illinois educators are provided.

Lyttleton C. (1994)^22 conducted a studied on ‘Knowledge and meaning: the AIDS Education campaign in rural northeast Thailand.’ Nearly 80% of Thailand’s population lives in the rural sector. To date, these villages have been subject to top-down dissemination of HIV/AIDS education information via the mass media and

^21 pdf.o.files.eric.ed.gov.opac.MSMS.edu/Fulltext/ED32770.pdf
^22 www.ncbi.nlm.nih.gov/pubmed18146703
bureaucratic networks. The study was an ethnographic enquiry into the impact education campaigns are having in one village in Northeast Thailand. It is found that AIDS information is primarily integrated with local conceptions of sexual behaviour and commercial sex. By the early 1990s, heterosexual behaviour is a major mode of HIV transmission in Thailand. Local and international media discourse focuses on the commercial sex industry in describing the spread of the virus. However, the lack of detailed research of sexual practices in Thailand makes accurate projections of HIV transmission difficult and allows unsubstantiated claims to be made concerning typical Thai sexual behaviour. This paper explores the local context in which these practices are found and discusses the meanings villages attached to HIV/AIDS information. Knowledge levels and behaviour changes are assessed and it is argued that community based imperatives are essential for effective future campaigning.

Priya Banerjee and Courtney Mattle (2005)\textsuperscript{23} conducted a study on “Knowledge, Perceptions and Attitudes of Youths in India Regarding HIV/AIDS”. The HIV/AIDS pandemic is steadily increasing in severity throughout the developing world. Recently, Southeast Asia has become a rising concern for health care professionals in the field of infectious disease (UNAIDS, 2004). Most of Southeast Asia is experiencing surging prevalence and incidence rates of HIV infection. One particular country of interest is India. Indian population has surpassed one billion, making it the world’s second most populated country. Indian large population exacerbates the problematic scenario of HIV sero-prevalence rates that are increasing throughout the country and region. Youths in India lack knowledge about HIV and also have misconceptions about modalities of transmission, and many harbor negative attitudes towards those who test positive for HIV. In order to decrease transmission

\textsuperscript{23} JS.sagamomepub.com/giheplarticle/view/4051/0
rates among youth, quality HIV/AIDS education must be implemented in a culturally relevant manner. The aims of the study are to provide a synoptic view of the HIV/AIDS problem in India, focusing on the knowledge, perceptions and attitudes of the country’s youth.

**Suneet Pramanik and Maggie Charties (2006)** conducted a study on “HIV-AIDS stigma and knowledge among predominantly middle-class high school students in New Delhi”. The study was examined the stigmatizing attitudes towards AIDS among middle class adolescents in New Delhi. The study assessed attitude AIDS and sexuality and knowledge about HIV related health resources. Result showed that they generally lacked accurate knowledge about the disease and of related health resources. However those with greater exposure to AIDS education demonstrated signification greater AIDS knowledge. Female adolescents demonstrated significantly less knowledge about AIDS compared with male adolescents while the males reported significantly greater exposure to AIDS Education compared with females, especially among female adolescents. Education must directly address stigmatizing attitudes about AIDS gaps in AIDS knowledge and awareness of HIV related health resources.

**Deshmukh J.S., et al. (2007)** conducted a study on ‘AIDS knowledge and attitudes of university in Nagpur Department of preventive and social medicine’. The study was among university students in Nagpur to assess the basic level of knowledge regarding AIDS. Arts and commerce students expressed their desire to learn more about AIDS. The study were identified considerable extent of knowledge and positive attitudes amongst science students but arts commerce students had commerce students had inadequate and poor knowledge. The results of this study shows that there is a

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need of effective health education campaign for this risk group of individuals which will help them to develop the skill to act on their knowledge and communicate it to others. Most students from both faculties believe that the government should play an important role in fighting HIV-AIDS in India.

**Brus M.J. and Jennit A. (2010)**\(^{25}\) conducted a study on ‘HIV knowledge, attitudes and practices among 12\(^{th}\) grade students in southern India, before and after an HIV-education session’ Education about sex and sexually transmitted disease is uncommon in southern India, and it is unclear whether classroom instruction in HIV can change student knowledge or attitudes. To assess students’ knowledge, attitudes, and practices about HIV before and after an educational session. 1,168 12\(^{th}\) grade students from four schools in the Tamil Nadu state of India participated in a one to two hour session on HIV. Students completed anonymous, Tamil-language questionnaires about HIV topics immediately before and after the session. Many students endorsed erroneous facts about HIV before the session, but correct survey scores increased by 24% afterwards. Thirty-five percent of students knew someone with HIV, and familiarity with an HIV-infected person was associated with greater pre-session HIV knowledge. HIV knowledge was equivalent in students who held stigmatizing and non-stigmatizing attitudes, but the session significantly reduced stigmatizing attitudes from 38% of students to 29%. One percent of students admitted to having had sex. The proportion of students who think classroom HIV education is important rose significantly from 80% before the session to 90% after. Indian 12th-graders lack some basic knowledge about HIV, but only a couple hours of education was necessary to significantly and substantially increase short-term knowledge. Education-but not factual knowledge per-se was associated with a decrease in

stigmatizing attitudes. Because most 12th-graders reported not having had sex, high school may be an appropriate age for intervention. Most students desired HIV education in the classroom, and exposure to this education increased its acceptance.

**Mesfin Awoke Bekalu and Steven Eggermont (2013)** conducted a study on “Media use and HIV/AIDS knowledge: a knowledge gap perspective”. The study examined the relationship between HIV/AIDS-related mass media use and HIV/AIDS-related knowledge among urban and rural residents of northwestern Ethiopia. A hierarchical regression analysis indicated that HIV/AIDS-related mass media use has both sequestering and mainstreaming effects in certain segments of the study population, although it was not a significant predictor of HIV/AIDS-related knowledge in the total population. The knowledge gaps between individuals with high and low education and between individuals who experience high and low levels of interpersonal communication about HIV/AIDS narrowed as HIV/AIDS-related media use increased, but the gap between urban and rural residents widened. The widening gap could be explained by differences in perceptions of information salience and several theoretical assumptions. Current mass media information campaigns, which are often prepared and broadcast from urban centers, may not only fail to improve the HIV/AIDS knowledge of the rural populace but also put rural populations at a disadvantage relative to their urban counterparts. Communication interventions informed by socioecological models might be helpful to redress and/or narrow the widening knowledge gap between urban and rural residents.

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26 [www.pto.researchgate.net/236638218.medio-use](http://www.pto.researchgate.net/236638218.medio-use)
2.4 STUDIES OF HIV-AIDS AWARENESS

Chambliss and Catherine (1987) took up a study on “College faculty promotion of AIDS awareness” at the Ursine College in Pennsylvania. Both knowledge and attitude toward AIDS were summarized. 73% of 141 introductory psychology students were chosen as sample for conducting the study. The study dealt with moderate to extreme interest in learning more about AIDS. 98% of the sample reported they learnt about AIDS through various media. The study greatly inspired the lecturers to great extent they started implementing AIDS Education through various strategies to teach their students while teaching different subjects and more relevantly while teaching subjects like Biology especially studying with aspects of Virus. The findings of the study include – The faculty had up-to-date information about AIDS and how to curb its spread. The motivation to make any appropriate behavioural changes to reduces our own risk. Faculty had willingness and the ability to share the information with others constructively.

McCoy, et al. (1989) conducted a study on “AIDS Awareness of High school students: An Exploratory study” 182 high school students was chosen as sample to conduct the study. The study was conducted from three different districts of Indiana University, South Bend, Indiana, United states of America. The schools in these districts had adopted an AIDS component as a part of their health curriculum. Focus was on evaluating the effectiveness of AIDS Education in the secondary schools in one metropolitan area of Midwestern state. Individual inventory items were tested for the significance by the Chi-square Goodness of Fi’t’ test. 40 items were answered incorrectly by a significant number of students. Although most students knew the general definition of AIDS, they did not know specifics. Most students
knew that AIDS is transmitted by blood or semen, through sexual contact or blood transfusions. They knew that AIDS may be carried by apparently healthy individuals and that risk is increased by sexual promiscuity. Nevertheless, the students held misconceptions regarding transmission, specific effects of the disease, and social implications. Results indicate that: (1) in general, students are informed about AIDS; (2) anxiety levels are high; and (3) beliefs that AIDS can be transmitted in the schools must be countered. Schools can function as conduits for information and as sources of support.

**Owuamanam T.O., et al. (2000)**\(^{29}\) conducted a study on ‘Non-Regular Education and Intervention on HIV-AIDS Awareness and Educational Training Strategies in Nigeria: Implication for Counseling’. They examined the recent developments in HIV-AIDS intervention. It was also an attempt to investigate the level of awareness of undergraduates towards AIDS In addition, it examined educational training strategies. The study revealed that the awareness among undereducated was not total and more enlightenment campaigns, seminars, behaviour change Programmes and healthful living seminars, lectures should be carried out on the campuses. This will created total awareness on the deadly virus and diseases. Study also recommended that there is a need for the provision of counseling centers and appointment of qualified counselors in institution to help in creating awareness and prevention through counseling.

**Malya Govinappa S.K. (2000)**\(^{30}\) studied ‘Attitudes and awareness on HIV-AIDS and sexuality among youth; International conference AIDS’. The study was conducted in Mysore to evaluated the existing level of awareness information and prevalent attitudes among the Educated youth on HIV-AIDS to recognize the fears

\(^{29}\) wikieducation.org/images/5/56/PIO-751.pdf
and misconceptions about HIV-AIDS so to evolve appropriate intervention programmes, the changes in the value system of natural explorative behaviour and peer pressure. According to this study there is an imperative need for evolving a national HIV-AIDS control programme with government coming out with a policy document on HIV-AIDS control and prevention. They found that is a clear change in value systems and attitude of the youth especially with regard to sex. The state should remove taboo revolving around and introduce sex education in the school curriculum. Parents and teachers instead of helping youth to come out of their dilemmas have instead become barriers hampering their development as healthy individuals both mental as physical.

Kumari K. (2004) studied ‘Attitudes and awareness on HIV-AIDS among the youth of Jharkhand International conference on AIDS’. The researcher studied attitudes and awareness on HIV-AIDS among the youth of Jharkhand this study shows that the college youth have fairly good knowledge about HIV-AIDS. According to this study attitudinal change Programme is urgently needed to change the existing knowledge of the youth about HIV-AIDS affected persons. This may change the behaviour of the youth. It will have a positive impact on HIV-AIDS prevention Programme.

Jayakumary M. and Jayadevan S. (2004) studied ‘HIV-AIDS awareness among adolescents academy of medical sciences Kannur’. They study observed that when the majority of people become sexually active. Adolescents are more vulnerable for developing any sort of habit. They get the knowledge regarding sex from their peer group pillow books, etc., which not give them correct information and some time mislead them. This study was aimed to assess the level of awareness of the modes of transmission and prevention of HIV-AIDS among adolescents in Kerala, out of 3000
students studied majority was in the age group of 14-16 years. They study was emphasizes the need for including the sex education and health education in school curriculum.

**Cecilia Ncane Mkhonto (2005)** focused on the AIDS awareness Programmes and the management of these Programmes in secondary school in the North-West province of Africa by using a literature review and empirical investigation. The study was based on the views of a small sample of teachers principals and learners in the secondary schools. Through the study the investigator could find out the obstacles to successful awareness Programmes and recommendation were made. The study suggested the need for training through in service Programmes and to train the educators to manage the AIDS awareness Programmes strategies should be made to ensure the involvement of the whole community in the awareness Programme.

**Sharon D., et al. (2005)** conduct studied on “Social Capital, Health and HIV Awareness of Girls in a Rural Caribbean Community” among Girls and young women are bearing the heaviest burden of the rising HIV epidemic in the English-speaking Caribbean. Previous research has highlighted the importance of understanding geographical and sociocultural factors in the spread of HIV among this population. The study were paper reports an exploratory case study which assessed the role of social capital in health and HIV awareness among girls and young women in a rural, isolated community on Andros Island, Bahamas. We examined features of rural community life such as social networks, community engagement, safety and trust in relation to the health and HIV/AIDS awareness of school-aged girls living in this environment. Using focus group discussions and structured writing exercises, they collected information from 18 school girls aged 9 to 16 years about community

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31 files.eric.ed.gov/fulltext/EJ794079.pdf
structure, friendship networks, participation in community life, and issues of safety and trust. They further explored concepts of health and perspectives on HIV/AIDS. Findings revealed a close-knit community in which girls were social as well as economic participants. Girls felt safe, trusted their elders and had an awareness of health and HIV related issues. These social capital elements can play an important role in HIV prevention for girls in the rural Caribbean.

**Lawal B.O. (2006)**[^32] was investigated HIV-AIDS awareness among secondary school teachers in Kwara Lagos and Ogun state of Nigeria. The study revealed that the level of awareness among secondary school teachers is very low. It was also revealed among others the difference between single and married in their awareness of HIV-AIDS is not significant. It was recommended that individuals should avoid both premarital and extramarital sex. Young people should be given awareness about AIDS. That government should provide adequate funding for HIV-AIDS research that the pandemic should be discussed with other around you for the purpose of awareness.

**Solomon O., et al. (2006)**[^33] conducted a study to examine women and the HIV/AIDS epidemic: the issue of school age girls awareness in Nigeria information was elicited from 1,222 randomly selected regular under-graduate female students from the 11 faculties of the University of Lagos, Nigeria, with the use of a standardized structured questionnaire. Results of the major objective of the study, that is the level of HIV/AIDS awareness among female undergraduate students, showed a moderate level of awareness, including other specific objectives of age, level of study and marital status. In contrast, at the graduate level the 600 level of study medical students showed a high degree of awareness, and it was only divorce as a sub-variable

[^32]: 202.193.70.166/mirror/MECEMIRROW/JXGCO102CAD26350052.pdf
[^33]: Vc.bridgew.edu/cgi/viewcontent.cgi?article:13602context=jins
of marital status that showed a low level of awareness. The paper then made some recommendations, that what is needed in Nigeria is to address the cultural, biological and socio-economic conditions contributing to women greater vulnerability to HIV/AIDS epidemic.

**Christo van Vvyk (2005)** studied the perceptions attitudes and awareness of undergraduate students in the North-West university result indicated that students experienced and perceived with regards to biographical variables in terms of their perception attitudes and awareness regarding HIV-AIDS. Differences were also found between students in different study modules and study years. HIV-AIDS while some students had detailed knowledgeable of the disease and its prevention others were either completely ignorant about it or deny its existence. Recommendations were made for future research in the area of HIV-AIDS within the context of tertiary education.

**Sathesh Kumar C. and Vijayalakshimi V. (2008)** studied on ‘The researchers attempted to bring out the level of awareness and knowledge of HIV-AIDS among the educated and uneducated youth of Puducherry region’ through a comparative analysis. It was estimated that has India has four million HIV-AIDS affected people most of the people becoming infected are in the sexually active and economically productive 15 to 44 age group. This means that most people living with HIV are in the prime of their working lives. Many are supporting families. It was believed that if preventive steps are not taken India will have the largest number of HIV-AIDS affected people. The adolescents and youth are more vulnerable to HIV-AIDS. The study conducted among youth educated and uneducated. Study proved that there is notable difference between the educated and uneducated youth in

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34 www.researchgate.net/48180305
terms of their knowledge about HIV-AIDS but the awareness level among the educated is not up to the satisfactory level, it is pathetic to realize that they have not even realized the basic causes and preventive measures for HIV-AIDS. On the whole their perception on HIV-AIDS was like any other ordinary diseases. The social values and customs abstain the people from knowledge and discussing about HIV-AIDS since it is mainly sexually transmitted disease. The study proved that there is no substantial difference between the educated and uneducated youth in terms of their knowledge about AIDS, but the awareness level among the educated youth is not up the satisfactory level comparing to the uneducated youth. So the study suggested that there is a need for an effective awareness Programmes among the youth.

Ruchi Sogarwal and Damodar Bachani (2009) examine the relative importance of awareness of STD, HIV/AIDS and condom use with socio-economic variables in India. Data collected in the third round of the National Family Health Survey 2005-6, have been used to purse the objective of the paper. A total of 124385 ever married women of in the age group of 15-49 years from 29 major states of India were included in the study. Logistic regression model was adopted to understand the significance of HIV awareness on condom use. Analyses reveal that awareness among women about STD excluding HIV was as low as 3.2 per cent. Only 4.8 per cent of the women reported condom use at the last sexual intercourse. 42-50 per cent of the ever married women from four states of India namely Rajasthan, Jharkhand, Chhattisgarh and Uttar Pradesh are not aware of any STD and HIV/AIDS. Socio-economic characteristics such as domicile, education and wealth index of household are found to be significantly associated with the level of HIV awareness and condom use at the last sexual intercourse especially among poorer, rural and uneducated women.

35 Medind.nic.in/hab/t.09/13/habt09/3p148.pdf
study highlights the need for integrated prevention Programmes that emphasis on the use of condom for HIV prevention as well as STDs. Further investigations are required to understand the reasons for the low use of condoms in India.

Sudha B. Yadav, et al. (2010) conducted a study on Awareness of HIV/AIDS among rural youth in India. A community based cross. A community-based cross-sectional study was conducted among youths aged 15-24 years in rural areas of the Saurashtra region of Gujarat, India. A cluster sampling design was used, surveying 50 subjects from each of 30 clusters. Data was collected through house-to-house visits using a semi-structured questionnaire. Proportions and logistic regression were used for analysis. Out of a total of 1,237 subjects who participated in survey, 60% knew something about HIV. Of those who had heard of HIV, more than 90% subjects knew the modes of transmission and more than 80% were aware of modes of prevention of HIV/AIDS. One fifth of the subjects had misconceptions in relation to HIV/AIDS. On applying multiple logistic regression, age, education, occupation, and mass media exposure were found to be the major determinants of their knowledge with regard to HIV/AIDS. Conclusions: Basic knowledge of HIV/AIDS is still lacking in two fifths of the rural youth. Literacy and media exposure are factors that determine awareness of HIV among them and can be helpful to raise their knowledge regarding this scourge.

Unnikrishnan B. et al. (2011)\textsuperscript{36} conducted a study on “Awareness and attitude of the general public toward HIV/AIDS in coastal Karnataka” To assess the awareness and attitude of the general Public toward People Living With HIV/AIDS (PLWHA) in Mangalore, a city in Coastal Karnataka Community-based cross-sectional study. The study population included 630 individuals aged 18 years and

\textsuperscript{36} www.ijcm.org.in/article.asp?ISjn=0970.0218
above. The information was collected using a semi structured pre-tested questionnaire. The questionnaire consisted of 24 questions regarding awareness of the modes of transmission of HIV/AIDS (nine questions) and questions to assess the attitude toward People Living With HIV/AIDS (PLWHA) (15 questions). Statistical package SPSS version 11.5 was used, Chi-square test was conducted and P< 0.05 was considered as statistically significant. About one-third of the study population thought that one could get infected by merely touching HIV positive individual. Approximately 45% stated that they would dismiss their maid on finding out her HIV positive status. About 54% were willing to undergo the HIV test. The respondents with less than secondary school education had a discriminatory attitude toward HIV positive people, with regard to them deserving to suffer, dismissing a HIV positive maid, hesitating to sit next to a HIV positive person in the bus, divorcing the infected spouse, and willingness to get tested for HIV, which was found to statistically significant. Stigma among the general public was mostly due to fear of contracting the illness. Stigma does exist to significant degrees among the educated people, which was suggested by about 45% of the participants being willing to undergo the HIV test. There is a need for greater attempts toward making information regarding HIV/AIDS available to every individual of the society.

2.5 STUDIES ON HIV-AIDS EDUCATION

Surendra Mahto and Jitender Kumar (2008) conducted a study on “B.Ed. Teacher trainees Knowledge and attitude towards HIV-AIDS Education” among 300 B.Ed. Teacher trainees in Ghaziabad (U.P.). Tool was used for the study is “HIV-AIDS Knowledge and Attitude Scale” to measure Knowledge and Attitude towards HIV-AIDS Education. Findings of the study include 65% of Teacher trainees had complete Knowledge about AIDS Education out of which 42% in Arts stream
trainees and 78% in Science stream. There was no significant difference with respect to gender issue 66% of Male teachers and 64% Female teachers had Knowledge of AIDS Education. 77% of B.Ed. teacher trainees had positive attitude towards AIDS Education out of which 67% were Male B.Ed. trainees and 87% were Female B.Ed. trainees.

**Deborah Holtzman (2009)**\(^{37}\) conducted a study on ‘HIV Education and Health Education in the United States: A National Survey of Local School District Policies and Practices’. The study aims at determine the extent to which HIV education and health education policies and practices are required by school districts in the United States, a national probability sample of public school districts was surveyed by mail in 1990. 2,150 districts selected, 78.1% responded. HIV education was required by 66.9% of districts. The percentage requiring HIV education increased by grade level from 29.7% in kindergarten to 82.3% in 7\(^{th}\) grade, then declined to 37.3% by 12\(^{th}\) grade. Districts that required HIV education most often addressed HIV-related prevention skills in the upper grade levels. Similar to requirements for HIV education, health education requirements also declined from 7th to 12th grade, reaching even lower levels than HIV education by the last two years of high school. These declines are of particular concern given that students are most likely to engage in risk behaviours when HIV and health education is least likely to be required, and practices and policies that support HIV and health education also were lacking in many districts.

**Pradeep Kumar Misra (2009)**\(^{38}\) studied the scope of using Educational media for HIV-AIDS awareness and training to school students in India and the innovative strategies regarding the awareness. The study revealed that it is high time

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\(^{38}\) wikieducator.org/images/1/10/P.O60.pdf
to utilize tremendous creative and communicating power of mainstream media for AIDS awareness and training to school students and their parents. The use of educational media offers immense possibilities to create awareness and transmitting crucial information about HIV-AIDS issued to school students. The researcher has a belief that adoption of proposed strategies in India will be helpful to impart knowledge about AIDS among students. The study also revealed that documentaries and films about AIDS could make an impact among the students. The suggestions given by the respondents to increase the awareness of HIV-AIDS is through media skits and dramas in village and other areas by practicing monogamy and through protected needles and syringes.

**Esther A.J. et al. (2011)** conducted a study on “Education about HIV/AIDS theoretical underpinnings for a practical response Human immuno deficiency virus (HIV) and acquired immuno deficiency syndrome (AIDS)”’. The study was offers a conceptual framework for understanding some of the main approaches to HIV-AIDS related education being implemented today, drawing a distinction between approaches which are ‘scientifically’ informed; those that draw upon notions of ‘rights’ and those which are overtly ‘moralistic’ in the sense that they promote conservative moral positions concerning sexuality and sexual acts. In outlining these three approaches, They examine different ways in which the terms ‘science’, ‘rights’ and ‘moral values’ are conceptualized and some of the key assumptions underpinning different forms of HIV-AIDS related education. Findings will be useful for those desiring to develop a typology of approaches to HIV-AIDS related education and their potential.

**Haribondhu Sarma and Elizabeth Oliveras (2013)** conducted a study among teachers to identify the factors that support or hinder their role in HIV/AIDS

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39 her.oxfordjournals.org/content/early/2011/01/25/her.cyq088.full
40 www.ncbi.nlm.nih.gov>NCBI>Literature>PubMedCentral(PMC)
Education. A self-administered questionnaire was used for interviewing teachers from randomly-selected schools in two adjacent districts in Bangladesh. Based on exposure to teachers’ training, the districts were divided into control and intervention areas and the teachers’ ability, skill, and their participation in HIV/AIDS Education were compared between the districts. Trained teachers in the intervention schools were more likely to participate, less likely to face difficulties, and more likely to use interactive teaching methods in HIV/AIDS classes compared to the controls who did not receive any training. Inadequate allocation of time for conducting the HIV/AIDS class was found to be barriers to HIV/AIDS education that suggest the need to provide teachers with more support in terms of training and logistics.

2.6 STUDIES ON HIV-AIDS EDUCATION IMPLEMENTATION

Mathews C., et al. (2006) studied on “Factors associated with teachers’ implementation of HIV/AIDS Education in secondary schools in Cape Town, South Africa”. This study investigated the factors influencing whether high school teachers implemented HIV/AIDS education. The independent variables included constructs derived from expectancy value theories, teachers’ generic dispositions, their training experience, characteristics of their interactive context and the school climate. We conducted a postal survey of 579 teachers responsible for AIDS education in all 193 public high schools in Cape Town. Questionnaires were completed and returned by 324 teachers (56% response rate) from 125 schools. Many teachers (222; 70%) had implemented HIV/AIDS education during 2003, and female teachers were more likely to have implemented than males (74% vs. 58%). The teacher characteristics associated with teaching HIV/AIDS were previous training, self-efficacy, student-centeredness, beliefs about controllability and the outcome of

41 www.uky.edu/drlane/research/ISLESAMathews.pdf
HIV/AIDS education, and their responsibility. The existence of a school HIV/AIDS policy, a climate of equity and fairness, and good school-community relations were the school characteristics associated with teaching HIV/AIDS. These findings demonstrate the value of teacher training and school policy formulation. They also demonstrate the value and importance of interventions that go beyond a sexual health agenda, focusing on broader school development to improve school functioning and school climate.

Liesbeth E., et al. (2011) present a process evaluation of the implementation of the sex education Programme the World Starts With Me (WSWM) for secondary school students in Uganda. Purpose of the study was following mixed-methods. Study was to examine factors associated with dose delivered (number of lessons implemented) and fidelity of implementation (implementation according to the manual), as well as to identify the main barriers and facilitators of implementation. Teachers’ confidence in teaching WSWM was negatively associated with dose delivered. Confidence in educating and discussing sexuality issues in class was positively associated with fidelity of implementation, whereas the importance teachers attached to open sex education showed a negative association with fidelity. Main barriers for implementing WSWM were lack of time, unavailability of computers, lack of student manuals and lack of financial support and rewards. Other barriers for successful implementation were related to high turnover of staff and insufficient training and guidance of teachers. Teachers’ beliefs/attitudes towards sexuality of adolescents, condom use and sex education were found to be important socio-cognitive factors intervening with full fidelity of implementation. The findings can be

42 www.biomedcentral.com/1471-2458/11/334
used to improve intervention implementation and to better plan for large-scale dissemination of school-based sex education Programmes in sub-Saharan Africa.

2.7 STUDIES ON SEX EDUCATION

Pradhan, et al. (1996) studied on ‘Moral Judgment of Tribal Secondary School Children in Relation to their Sex’ attempted to study the independent and interactive effects of tribal and non-tribal difference and sex on moral judgment; and examine the attainment of autonomous level of moral judgment of secondary school children. The study was found that (a) tribal children were found to be significantly higher as compared to their non-tribal counterparts on moral stage score. (b) Interaction effect of sex and tribal non-tribal status was not significant. (c) No difference was found in the attainment of autonomous level of moral judgment.

Lal S.S., et al. (2000) conducted a study on ‘Knowledge and Attitude of college students in Kerala towards HIV-AIDS sexually transmitted diseases and sexuality’. In the study the researchers was assessed the knowledge and attitude towards AIDS sexually transmitted diseases and sexuality among college students for evaluation because they are a group at risk for contracting HIV infection. According to the study awareness of AIDS and its modes of transmission were high. In comparison awareness about sexually transmitted diseases and methods of prevention of HIV and sexually transmitted diseases was low. There were clear gender and rural-urban differences in knowledge. Urban students also demonstrated a more favorable attitude towards AIDS. They study underscores the need to target the girl students and rural areas in Kerala in the efforts to disseminate knowledge of AIDS sexually transmitted diseases and sexuality.

43 www.ncbi.nlm.nih.gov/pubmed/11190050
Lucky Gospel Amaugo, et al. (2014) conducted a study on “The effectiveness of HIV/AIDS school-based sexual health Education Programmes in Nigeria: A systematic review”. HIV/AIDS is one of the most important public health challenges facing Nigeria today. Recent evidence has revealed that the adolescent population make up a large proportion of the 3.7% reported prevalence rate among Nigerians aged 15–49 years. School-based sexual health education has therefore become an important tool towards fighting this problem. This systematic review assesses the efficacy of these educational Programmes and examines how future Programmes and their evaluations can improve. Primary literature published between January 2002 and May 2012, which measured sexual health outcomes among school-based Nigerians before and after a sexual health education Programme was delivered, was identified. All seven studies that met the inclusion and exclusion criteria showed there had been positive changes in outcomes following these educational Programmes. These included increased knowledge, healthy attitudes and safer sexual health behaviour. However, these studies each had methodological flaws which highlighted a range of important design, implementation and evaluation challenges that future Programmes need to meet.

Yodida Bhuita (2014) conducted a study on ‘Attitude towards Sex Education’. The present study was conducted in Shillong city the capital of Meghalaya. It was found that parents have very high positive attitude and even students have high positive attitude towards sex education and only teachers have low and moderate attitude towards sex education. The study indicates that parents are willing to provide formal sex education to their children and students are prepared to learn. The sample consisted of 500 individuals consisting of 94 parents 150 teachers

44 Her.oxfordjournals.org/content/29/4/633.abstract
and 256 students and purposive sampling was used for selecting sample from the population. Attitude scale Towards sex education which is a standardized tool developed by Dr. Usha Mishra Reader University of Allahabad. The study used survey method. 14.89 percent parents have very high attitude towards sex education majority 54.25 percent have high attitude towards sex education whereas 30 percent parents have moderate attitude towards sex education, majority 65.33 percent teachers have moderate attitude towards sex education and only 18.66 percent have high attitude towards sex education and 16 percent have low attitude towards sex education. Majority of students 52.14 percent have high attitude towards sex education 29.18 percent have very high attitude towards sex education and only 18.68 percent students have moderate attitude towards sex education.

2.8 CONCLUSION

From the review conducted, it is evident there are many studies conducted on causes and consequence related to HIV-AIDS as disease and related issues which revealed that the personal awareness and knowledge of health behaviour. There are limited studies about HIV-AIDS education and its awareness between teachers and students

- There are considerable numbers of studies on HIV-AIDS disease but there is no specific studies carried on HIV-AIDS Education at secondary school.
- HIV-AIDS education about awareness and implementation in related to teachers who are working in secondary schooling is found very limited in the state.
- Studies related to understanding on HIV-AIDS education awareness and its implication in day to day life of secondary school students are found very in the state.
• Good numbers of studies carry out on HIV-AIDS knowledge and awareness for different stakeholder in the national prospectus. However, reviewing amp of various sources it was observed that there is no regular based classroom activities and follow up programme studies in secondary schooling.

• The investigator has made a sincere and concerned effort to systematically compile the available sources at different level on HIV-AIDS education. Hence, no study has made significant focus in the area of secondary schools teachers and students in Mysore district. So, it was felt that there is a need for the present an analytical study on “Awareness of HIV-AIDS education and its implementation at secondary school level”. Therefore, the present study is very relevant in Indian context and contributes to understand the status of awareness and implementation of HIV-AIDS education Programmes.