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INTRODUCTION
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CHAPTER I
INTRODUCTION

FUNCTIONS OF EDUCATION

Education is a man-making process. Education is viewed as a process that brings desirable changes into the behaviour of human beings. According to Swami Vivekananda, Education should form the character, increase the strength of the mind and expand the intellect of an individual. Education is the process of bringing about the best in an individual and human being must be encouraged to bring about the best of his utilities, through that the community is developed. It also refers to specific training of the mental and physical capacities generally in an institution of learning.

Education is often regarded as synonymous with learning, as the acquired experience of any sort - intellectual, emotional or sensorimotor. It is the process by which and through which the experience of race ie. the knowledge, skills and attitudes are transmitted to the members of the community. Education is the process through which an individual is developed into an individuality- and a person into a personality.

The National Policy on Education (1986) sees education as fundamental to our all round development, material and spiritual. It is convinced that education refines sensitiveness and perceptions that contribute to national cohesion. It is also convinced that education is a unique investment in the present and the future.

In the words of the committee on National Integration presided over by Sampurananand, "Education should aim at equipping students with an intimate knowledge of different aspects of this country including the events that led to freedom, encouraging all students and activities which lead to a greater understanding between communities and states thus fostering a feeling that the country and its resources belong
to the citizens who thereby acquire certain rights and privileges along with corresponding duties and responsibilities”.

Education is a complex concept which refers both to a process as well as a product. It is viewed as the sum total of what is received through learning that is acquisition of knowledge, skills, attitudes, values, transmission of culture, development of personality and liberation or self-actualization. As a process, education involves the act of developing these products in oneself.

The main function of our present educational system is towards promotion of quality and excellence in order to meet the challenge of science and technology, providing wider opportunities for vocational education and the development of human resource potential to its fullest extent. New methods and techniques are required for dealing effectively with the society since it is fast growing.

HIV AND AIDS: NATURE OF SPREADING

AIDS (acquired immune deficiency syndrome) was first identified in 1981. It is caused by the virus HIV (human immune deficiency virus), which reduces the capacity of the body defences (or immune systems) to combat infections. There is generally a time lag of several years even 10 years or more between the initial infection and the start of AIDS. Without a blood test, it is usually not possible to be certain whether a person has HIV. Most people with HIV do not know they are infected; they generally look and feel absolutely normal. There is still no vaccine against HIV and no cure for AIDS. Although most AIDS related illnesses can usually be treated with standard medicines, the advanced stage of AIDS inevitably leads to death. HIV infection has now been reported from every country on the globe, but patterns of occurrence and cause varies in different parts of the world.
From HIV infection to AIDS

- Once HIV enters into a human body it selectively attacks CD4T cells, responsible for fighting infection.
- Virus replication is complex and many viruses are formed with different antigenic characteristics. So body fails to produce antibodies.
- CD4T cells are attacked by continuously multiplying viruses and are destroyed.
- The immunity of body depletes against any common infection.
- Acquired Immune Deficiency Syndrome (AIDS) is the result.

AIDS has to be acquired. It has to be passed on from one person to the other either by sex or blood transfusion, or from infected mother to unborn child. It is difficult to get, but one has to take the necessary precautions. AIDS does not discriminate a person by sex, religion or caste.

The medium of HIV transmission is blood or sexual secretions (semen, vaginal or cervical secretions).

There are only four known ways or routes of transmission of the HIV as stated below:

i. Having sexual intercourse with an infected person.
ii. Transfusion of infected blood or blood product.
iii. By infected blood in syringes and needles and body piercing instruments.
iv. By an infected mother to her unborn child.

HIV spread through sexual contact

Infection with HIV through sexual relation is possible by the following direct contacts:

i. Contact between the penis and Vagina in heterosexual intercourse.
ii. Contact between the penis and the rectum in anal intercourse between man and women (heterosexual) or man and man (homosexual).

iii. Contact between seminal fluid (possibly also vaginal secretions including menstrual blood) and the mucous membranes of the mouth in oral (mouth to genital organs) intercourse (heterosexual and homosexual).

iv. A woman has a greater chance of being infected by an HIV infected male than man being infected by an HIV infected woman. This is because the contact period between the seminal secretions and the female body is longer than the contact between vaginal secretions and the male organ.

**HIV spread through blood transfusion**

Transfusion of infected blood from one person to another would directly transmit HIV into the blood stream of the recipient. The chances of passing on the virus in such a situation is close to 90%. Blood donation has no risk of acquiring HIV infection, one should donate regularly. It is safe to donate once in 3 to 4 months and increase the pool of uninfected blood. Contaminated skin piercing instruments are a problem in a number of settings. Certainly the use of intravenous drugs like heroin, cocaine, is an extremely risk for a variety of reasons, including the risk of acquiring HIV from sharing needles or syringes. In some cultures, traditional practices such as tattooing, ear-piercing, male and female circumcision and sacrifice are done with non-sterile instruments, and HIV can be transmitted in this way.

**HIV spreads on infected mother to unborn child**

HIV may be transmitted during pregnancy or child birth if the mother is HIV+ve. Children born of HIV+ve mothers are likely to be infected with the virus. There is 30% chance that the virus will be passed on to the unborn child.
The estimated distribution of cumulative HIV infection in adults by country or region in late 1994 explains that out of 2 million persons with HIV+ve estimate in South East Asia Region (SEAR), 1.5 million are estimated to be in India alone.

THE AIDS EPIDEMIC IN INDIA

HIV is thought to have entered India in the early 1980's, but it was only in March 1986 that the first cases of HIV infection were detected. The virus has spread with great rapidity along India's western and eastern coasts, and inward to reach all parts of the country. The epidemic varies widely from one region to the next, reflecting the country's great diversity. In the north western state of Manipur, HIV has already reached epidemic proportions among injecting drug users. In some other states, by contrast, only a few cases of HIV - and no cases of AIDS - have yet been reported.

India's first case of AIDS was reported in Bombay in March 1987, and by October 1995 a total of 2,095 cases had been officially reported but it is recognized that the actual total is much higher. As in other developing countries, most HIV infections and cases of AIDS in India go unrecognized and unreported due mainly to lack of HIV testing facilities and inadequate systems for diagnosis and reporting. By October 1995, only 21,131 HIV infections had been officially reported with Maharashtra, Tamil Nadu and Manipur accounting for most of these cases, largely because of better HIV diagnosis and reporting systems in these states.

The Government of India, in conjunction with World Health Organization, has estimated that 1.75 million people in India had become infected with HIV by the end of 1994. Since that time many thousand of new infections have occurred. Furthermore, according to Dr. Shivlal of the National AIDS control organization by the year 2000, up to
7 million people in India may be infected with HIV and 2 million are likely to develop AIDS.

Most information on the HIV epidemic in India is derived from limited studies of groups such as sex workers, truck drivers and injecting drug users, who are regarded as most vulnerable to HIV. For example, studies of Bombay's female sex workers, who number at least 50,000, estimated that over half were infected with HIV by 1994. As the first to bear the burnt of the epidemic, such groups are often mistakenly viewed simply as reservoirs of infection, and stigmatized as the only groups likely to transmit the virus to other section of population. Yet HIV is now spreading within the general population of India as well, mostly through sex between people who do not realise they may be passing on or receiving the virus during unprotected sexual intercourse.

**HIV : A Different Epidemic**

The HIV epidemic differs from other major infectious diseases in several important ways:

Because of the long time log-generally from 5 to 10 years or even longer - between the initial infection with HIV and the onset of clinical symptoms of AIDS, most HIV positive people generally feel quite normal. Unaware that they are infected with HIV, they continue to spread the virus to others. To prevent millions of infections and premature deaths in India, HIV awareness and prevention programmes must start well before the impact of the epidemic become visible.

HIV greatly exacerbates existing health problems, particularly the spread of TB, causing more human grief and placing even greater strain on already overburdened health services. According to WHO "TB and HIV form a deadly combination, each multiplying the impact of the other. When people are infected with both TB and HIV. TB is much
more likely to become active because of the person's weakened immune systems. As more TB cases become infections, a larger number of people carry and spread TB to healthy populations. In India, where 50-60% of the population are already carriers of the TB bacillus, the HIV epidemic is likely to lead to a dramatic increase in active TB cases.

There is no vaccine against HIV and no effective medical cure for HIV infection. Most HIV-related illness can usually be treated effectively with standard medicines, but when HIV disease reaches the advanced stage known as AIDS, it is invariably fatal. Preventing the initial infections with HIV is therefore the only way of preventing AIDS deaths.

Also unlike other infectious diseases, 80-90% of those infected with HIV are young adults at the peak of their productive and reproductive lives. They generally have young children, who are still dependent on them for sustenance, education, social support and moral guidance; they also have elderly dependents who, after their premature deaths, will be left to fend for themselves while trying to raise a generation of orphaned grandchildren.

HIV destabilises society because it brings fear, blame and stigma into families, neighbourhoods, work places, schools and place of workshop. It exacerbates long standing prejudices against stigmatised groups such as prostitutes, homosexuals and injecting drug users. It threatens basic human rights such as medical confidentiality, security of employment, the right to education, and even the rights to privacy and human dignity. No other disease affects human society in this way, or to this extent.
Contaminated blood is also an important source of HIV infection. Of the nearly 2 million bottles of blood that are transfused every year in India, more than half are supplied by people who sell their blood. Many do so out of dire poverty. In 1992, 86% of a group of commercial blood donors screened in Bombay were found to be HIV infected. Although the Government had made HIV screening mandatory, not all blood banks comply. By 1994, 12% of all HIV infections in the country were estimated to have been acquired through HIV contaminated blood.

In India, as in many other countries, the HIV epidemic has been perceived largely as a medical problem. Yet the epidemic has its roots in India's patterns of economic and social development, and in the attitudes, beliefs and values that determine the sexual behaviour. It is increasingly clear that HIV epidemic is primarily a development problem, which requires a multiplicity of responses from individuals, communities, government agencies and wide spectrum of non governmental organizations.

AIDS EDUCATION

The purpose of AIDS education is to prevent and control the spread of HIV and raise the level of understanding about associated problems. The development of the educational programmes on AIDS is the development of clear purpose. The educational programmes on AIDS should be designed, implemented, and evaluated to ensure that young people understand the nature of HIV infection and the actions they can take to protect themselves and others from HIV infections.

Objectives of AIDS Education

The objectives of the AIDS education are stated as follows:

At the end of instruction in AIDS education, the learners:

1. understand the nature and modes of transmission of HIV.
2. recognize the symptoms of HIV infection, AIDS and know where to find appropriate resources, counselling, and medical care.

3. be able to make informed decisions about personal and social behaviour that reduces the risk of HIV transmission.

4. be able to rejecting biased information and myths relating to HIV infection/AIDS.

5. show solidarity towards people infected with HIV, respecting their right to privacy and confidentiality and recognizing the benefits of the continued participation of HIV infected people.

Education about AIDS must be primarily concerned with the prevention of transmission and optimization of health.

**The AIDS Education Objectives and Student Behaviour**

In the classroom level, knowledge, attitudes, and skills are closely linked. The attainment of objectives regarding knowledge is essentially a step towards achieving other goals. The knowledge about modes of HIV transmission should increase the students motivation and ability to protect himself or herself and others. However, it is behaviour that reduces the risk, not knowledge alone. Education about skills can enable a student to act on knowledge learned in the classroom. Observers often note a direct association between education and behaviour in very young children. This link is less obvious in adolescents as the influences of their peers become more powerful and the urge to act independently becomes more marked. For this reason, education involving the "rehearsal" of skills and behaviour is important, to assist adolescent to choose behaviour that is in line with their own knowledge and attitudes even if it differs from that of their peers.
Moral, Cultural, Religions and Philosophical Issues in AIDS Education

The educational programmes about AIDS must take into account the culture, sexual behaviour, and educational norms in the area. Any educational programmes the programme planner need to take into account the religions and cultural outlook of the community in which the programme will be implemented. They can do this by involving community leaders, including religious leaders in some aspects of programme design or review other group eg. young people's group, teachers' Organization, social scientist, the specialists who conducted the initial assessment, and school administrators, may be included to help define the needs the programme must meet.

A basic programme may be designed centrally and elaborated upon or altered in each community to make it culturally appropriate. However, any alternating mode must not lead to the exclusion of essential information and activities. It is sometimes difficult to reconcile programme objectives with cultural and community concerns, especially in countries with a variety of cultures, or marked differences between urban and rural areas. It is important to create a programme that takes account of the customs and culture of the community and to base it on a realistic assessment of risk behaviour and situations that arise in the community. For example, in a community where there is a significant amount of sexual intercourse among unmarried young people, it is unrealistic to promote monogamy and celibacy as the only options for prevention. Cultural norms and religions or philosophical principles may either be in conflict with or supportive of preventive options, and it will therefore be important to involve community and religious leaders in defining appropriate approaches. Assistance can often be obtained from the community, other government departments and non governmental organizations. A number of countries and educational systems have reconciled moral, cultural, religions, and philosophical issues in their implementation of educational programmes on AIDS. Supportive statements from leaders or institutions may help to convince others who are
relevant. The moral, cultural, religious, and philosophical issues involved in AIDS education because this give strong support from influential community groups in addressing the pertinent issues and behaviour in the community.

**Context of Education about AIDS**

The context chosen for AIDS education will provide a framework for, and may facilitate, decisions about it, the teaching style to be adopted, and who is to teach the programme.

The following questions need to be considered:

- Should AIDS education be a curriculum subject area on its own additional to the subject already existing with the educational system?
- Should AIDS education be placed within other health-related subject areas in the curriculum?
- Should AIDS education be integrated, as appropriate into other subjects?
- AIDS education could be provided within one or more of the following subjects:
  - education on sexuality;
  - population education;
  - health education;
  - family life education;
  - education on personal development and living skills;
  - biology or general science;
  - social science;
  - civics, political science and current affairs;
  - religious and philosophical education.
It could also be covered in any other appropriate subject area or across a number of subject areas.

In choosing the most appropriate subject areas, education authorities and teacher representatives should consider the following questions:

* What are the benefits and costs of the educational system of providing AIDS education within an existing subject area, or alternatively as a separate subject area?
* Who will teach the programme and how will teachers be trained?
* What resources will the programme require and how will they be obtained?
* What existing subject areas best accommodate the philosophies, directions, and goals of AIDS education?

A programme may be ineffective if children and adolescents do not appreciate that AIDS prevention is related to education on human behaviour and in broader terms, to health education. The maximum opportunity for reinforcement is afforded by a programme integrated within a number of subject areas. Broad integration, however, may result in the difficult areas being left out; each teacher may assume that these areas are someone else's responsibility.

If education on AIDS is incorporated within a single subject area, that subject must accommodate the goals, objectives, and teaching content of the programme. It must also be taught in a style appropriate to the content and philosophy of the programme.

A review of approaches used in many countries indicate that AIDS education is most effective when provided within a comprehensive health education programme, that includes teaching on the relationship between personal behaviour and health. AIDS
education is more effective when students are not only given information but also have the opportunity to develop self esteem and communication and decision-making skills if these skills are not covered in the curriculum, inclusion of AIDS may provide a focus for a shift towards a more effective and relevant education programme whose implications reach well beyond AIDS. Education provided in a comprehensive health education programme may be reinforced by integrating relevant content into other appropriate subjects areas.

Content of AIDS Education

The context of teaching on AIDS will influence the content of the programme. The choice of content is often made at the school level. Whereas the broad direction is usually the province of the educational system. As with objectives, the content must encompass knowledge, skills and values.

Knowledge

* What is HIV? What is HIV infection? What is AIDS?
* What causes AIDS?
* How are HIV transmitted? How are they not transmitted?
* Who can become infected with HIV?
* What can individuals do to prevent transmission of HIV and to maintain health? (If the person is HIV negative? If the persons is HIV positive?)
* What national and local AIDS prevention and control activities and services are available in the local community? What other resources available?

Attitudes, beliefs and values

* What is an attitude, a belief, a value?
* What are the attitudes of the local culture/society towards behaviour that puts people at risk of HIV infection?
What the students attitudes towards sexual behaviour and towards drug injection and other skin piercing practices, and how do they relate, to HIV?

What are the students attitudes (and those of their peers) towards sexual relationships?

What are the attitudes of those close to the students (for example, parents, friends, partners, religions leaders) towards sexual behaviour, drug injecting, and other skin-piercing practices?

How do issues of power and authority contribute to HIV transmission? (For example, are there certain people in the community or family who make the decisions about whom young people should marry, which professions they may follow, whether they must participate in ceremonies which involve skin-piercing or what kind of sexual behaviour is acceptable?

How do gender issue (for example the legal status of women in the culture) contribute to HIV transmission?

What are the attitudes in the community towards health and disease? Is disease available? Is health attainable? Who is felt to be responsible when people become sick?

What are the students' feeling about themselves and their worth, and how do those feelings affect, how they make decisions, how they communicate, and how they behave towards others?

What are students' attitudes towards other people (For example care and respect)?

What are the attitudes of the students and of others towards people with HIV and towards groups of people who are regarded as at risk of HIV infection? How would students feel if a friend had HIV infection?

What values within society and within the students' peer group promote unsafe behaviour? What values promote discrimination or misunderstanding? How can these be counteracted?
What values within society and within the students' peer group promote safe behaviour and concern for self and others? How can these be strengthened?

When and with whom is it culturally appropriate to discuss sexual matter or to talk about HIV?

Skills

How do communication skills contribute to HIV transmission? (for instance, is communication within relationship including negotiation about sexual issues, a skill the society fosters?)

How, when and with whom can students talk about relationships, including, when appropriate, sexuality?

What decisions must students make about HIV and how can they act on them?

How, when, and with whom can students talk about HIV/AIDS?

How does HIV affect students' relationships?

How can students protect themselves and others from contracting or transmitting HIV?

How can students act to counter discrimination and promote solidarity between those who are infected and those who are not?

Support

What can people in the community do to help prevent HIV infection?

What can students do to promote solidarity?

How do economic issues contribute to HIV transmission?

Where can students go and what can they do to get further information and services?

How can students support each other's decisions about HIV?
Education authorities, teachers' representatives, and other planners need to consider a number of important factors in deciding on content, including:

* the growth and development patterns of children and adolescents in the particular country or area.
* the cultural and religious values of the community.
* local data regarding
  - the prevent modes of transmission of HIV
  - the incidence among adolescents of HIV, use of injectable drugs, other skin-piercing practices, and sexual behaviour
  - the current and future risk among adolescents of contracting HIV
  - the differences between rural and urban students
  - the age at which compulsory schooling ends (in some countries there is a difference between the legal and actual leaving age)
* Ethical considerations for example, if the privacy of the students of his or her family affected?

**EDUCATIONAL TECHNOLOGY**

Educational technology involves a systematic application of scientific and technological knowledge and principles to the solution of educational problems especially learning. Educational technology improves the quality of education.

According to the commission on Instructional Technology, U.S.A. Educational technology can be defined as a systematic way of designing, implementing and evaluating the total process of learning and teaching in terms of specific objectives, based on research in human learning and communication and employing a combination of human and non-human resources to bring about more effective instruction.
The Association for Educational Communications and Technology, U.S.A. defines Educational technology as a complex integrated process involving people, procedures, ideas, devices, and organization. For analysing problems and devising, implementing, evaluating and managing solutions to those problems, involved in all aspects of learning.

The Council for Educational Technology, UK, defines Educational technology as the development, application and evaluation of systems, techniques and aids to improve the process of human learning.

According to the National Centre for Programmed Learning, GC, Educational technology is the application of scientific knowledge about learning and the conditions of learning to improve the effectiveness and efficiency of teaching and training. In the absence of scientifically established principles, "Educational technology" implements techniques and empirical to improve learning situations.

Educational technology has its developmental roots in audio-visual movement, research findings and theories of communication as well as the psychology of learning. According to the views of Dib (1980) "Educational Technology" can be described from three perspectives:

(i) as an assembly of technical materials and resources
(ii) use of mass communication system
(iii) an application of certain psychological models and principles under ideal learning conditions for facilitating learning.

Educational Technology is a vast subject as well as a system with a number of interconnected and interdependent components. It aims at improving all aspects of communication, ie. encoding, message, channel, barriers, decoding, retention and
application. Educational technology commits processes and products of instructional design and it encompasses learning psychology, communication and advances in sciences and technology. Educational technology deals with the processes of implementing methods and resources with regard to group dynamics and individual differences.

Educational technology principles are applicable to all topics and subjects and hence a basic to all curriculum development. Educational technology involves the process, product and process-product dimensions of providing qualitative education to enhance improved performances.

Concept of Educational Technology

Educational technology is the dynamic expansion of the field of audio visual education and the exciting new developments that promise much more for the future. The main objectives of the use of educational technology is the improvement of learning. Educational technology may be viewed as a system with a number of subsystems and components.

Educational technology promotes the efficiency of learning by improving the quality of teaching. Due to the knowledge exploration, educationists face the constant challenge of understanding the nature of technologies, their potential uses and their strengths and weaknesses.

Educational technology must mean technology of education presenting itself as a system for bringing improvement in the total process of teaching-learning by carefully analysing its problems and reorganizing all available resources in an economical way for the optimum results.
Objectives of Educational Technology

Due to educational technology, today, pupils acquire knowledge through the various media and behavioural changes via the teacher. The objectives are as follows:

1. To identify educational needs and specifications of the community.
2. To determine the aims of education, broad strategies and structure of education.
3. To develop abilities such as collecting data limitations, classifying etc.
4. To develop a suitable curriculum with interaction of science, art and human values.
5. To identify man-material resources and strategies for achieving the stipulated aims of education.
6. To develop certain models leading to improve the process of education technology and learning.
7. To develop the habits of concentration, self reliance and discovery.
8. To develop appropriate educational aids and equipments to meet the educational purposes.
9. To identify the major constraints in the environments and the ways and means to tackle them.
10. To help in extending educational opportunities to masses especially neglected sector of the community.
11. To develop the power of logical thinking.
12. To develop the powers of thinking and resowing.
13. To manage the whole educational system covering planning, implementation and evaluation phases.

TAXONOMY OF EDUCATIONAL OBJECTIVES

Education is the process of helping the individuals to adjust to this changing world. Such adjustment is not a some how one but a superior adjustment. The best type of
education is that which guides the immature child to live his life richly and abundantly and at the same time to contribute to social betterment. Evaluation on the other hand is a process of ascertaining the nature and quantum of change and should necessarily be based on or be directed towards such goals.

Learning happens when the pupil receives what the tutors perceive as necessary to be achieved when a course is taught in the learning centre. To know if learning has actually taken place, the tutor should have a clear idea about what they perceive as essential and how they want pupils to learn. ie. the objectives of teaching must be clearly defined so that the tutors keep those as frame of reference to find out if the process of learning has taken place and if so whether their teaching was effective. The effectiveness of teaching is the outcome of adapting appropriate teaching techniques to help people achieve these objectives and of an appropriate evaluations find out if learning has take place. The instructional objectives, teaching strategies and evaluation are the three salient features of effective teaching which brings about effective learning.

The tutor has to generate the instructional objectives from the curriculum of a particular course and use his as the guide for his teaching. To the extent that instructional objectives are made specific, observable and measurable and are adequately expressed in operational terms, the choice of appropriate teaching strategies and evaluation becomes easier. The first step towards formulating objective based instructional design is to have a clear concept of instructional objectives expressed in terms of student behaviour. This can be done by analysing each of general objectives into specific objectives. Number of models of objectives has been developed of which the most convincing is the taxonomical model of educational objectives of Bloom and his associates. Bloom and his associates have classified and organized objectives collected by them into three categories as cognitive, affective and psycomotor.
(a) Cognitive Domain

The cognitive domain refers to intellectual components of mental process and it obviously the most basic one from the point of view of education. There are six levels of learning in this domain and this category consists of cognitive or thinking abilities.

**Knowledge:** It is the ability to recall or recognize specifics, universals, methods, process, patterns, structure, settings, generalizations etc. The knowledge is the basic psychological process in use in remembering. This is distinguished from the remaining five which are together called intellectual abilities for the simple reason that the later requires "organised models of operations and generalized techniques for dealing with materials and problems".

**Comprehension:** Comprehension means understanding. What is being communicated and translating it through other means, interpreting specifics and extrapolation of the content communicated from the category.

**Application:** Application is the middle level objective. It pertains to the use of an abstract idea in a particular and concrete situation and thereby arriving at a solution of a problem. This may be defined on the ground that the word may be given an ad-hoc meaning by defining it adequately to cannote the use of acquired knowledge in unfamiliar situations.

**Analysis:** Analysis is the fourth category and connotes the breaking down of a communication into its constituent elements in a way that relationships or sequence or both of the components of a set of ideas are made clear. Some people treat it in an equivalent of the objective of critical thinking which is only partly true. Analysis is an important component of critical thinking but later is something more. Analysis may lead to the identification of elements, relationships or principles.

**Synthesis:** In synthesis, all the elements are analysed in such a way that they form a pattern or structure. By combing and organizing the elements a unique whole emerges. This objectives enables to develop creative ability among students.
**Evaluation:** Evaluation crowns all the categories and calls for the most complex mental process necessary for judging a materials, methods or communication against a standard, internal or external to it.

(b) **Affective Domain**

A taxonomy to describe objectives that reflect underlying emotions, feelings or values rather than cognitive or thought complexity and called the Affective Taxonomy has been developed by Krathwohl, Bloom and Masia (1964). This taxonomy describes the process by which one person's ideas, beliefs, customs, philosophies, attitudes etc. are gradually accepted and internalized by another person. This process usually begins with partial acceptance of an alternative point of view and culminates with the complete integration of this point of view into an individual's personal belief system. The five levels of affective complexity ranging from receiving level to characterization level are described as follows:

**Receiving:** Progressing through this level requires that a student has at least an awareness of some stimuli. Once, this has occurred, a willingness at least to listen or attend to the stimulus must be present. A learner will next be able to attend selectively to various aspects of the context within which the stimulus exists, differentiating those which are relevant to the stimulus from those which are not.

**Responding:** At this level, the responses of the learner indicate more than passive listening or attending. The responses involve in active participation. He, at the basic level of this category, will at least acquiesce to other's request, although given a choice he might choose some other activity. The next level in this category will indicate the learner's willingness to engage in an activity, even when allowed a choice. The highest level within this category is indicated by satisfaction after engaging in a response. The learner not only participates but also enjoys the activity.
Valuing: At this level, the learner judges an activity as to its worthiness and tend to do so consistently enough that the pattern is recognizable to others. The basic level in this category involves the acceptance of a belief, idea, attitude, etc. Though he has internalized the idea, he will not defend it publicly. At the next level, having actively pursued an idea, the learner will demonstrate a preference for it. Finally having been convinced of the validity of the idea, he may express commitment to the idea. At this point, he may demonstrate conviction, pursuing the goal or idea diligently.

Organization: As ideas are internalized they become increasingly interrelated and prioritized. At the first, the learner conceptualize a value by analyzing interrelationship and drawing generalizations that reflect the valued idea. At the next level, the values which have already been conceptualized are subject to the organization of a value system. It is evident that the valued ideas are arranged to foster their consistency and compatibility with each other.

Characterization: At this level, the learner behaves in a way that is consistent with their value system, avoiding hypocrisy and behaving consistently with underlying philosophy "automatically". At the first level in this category, the learner is predisposed to perceive, process and react to a situation in accordance with an internalized value system. At the next level, he shows consistency between his thoughts and behaviours.

NEED FOR THE STUDY

In India, as in many countries, the HIV epidemic has been perceived largely as a medical problem. Yet the epidemic has its roots in India's patterns of economic and Social development, and in the attitudes, beliefs and values that determine people's sexual behaviour. It is increasingly clear that the HIV epidemic is primarily a development problem, which requires a multiplicity of responses from individuals, communities, Government agencies and a wide spectrum of non-Governmental organization. Educational Technology having the potential to widen horizons, to focus attention to raise
aspiration and to create a climate for development through behavioural modification can be exploited to develop in the students the knowledge, attitude, and skills needed for human relationship, effective communication and responsible decision making making behaviour that will protect themselves and others from HIV infection and optimize health. It is imperative to determine whether Educational Technology could promote behaviour that prevents the transmission of HIV, posterering attitudes and behaviour that will prevent discrimination against those who are infected with HIV and promoting solidarity with them and also promote ideas and values that are constitutes to social concern, willingness to cooperate and respect for human rights. Hence a study like the present one is needed.

STATEMENT OF THE PROBLEM

The Government of India, in conjunction with WHO, has estimated that 1.75 million people in India had become infected with HIV by the end of 1994. Since that time, many thousands of new infections have also occurred. It has been projected that by the year 2000, 7 million people in India may be infected with HIV and 2 million are likely to develop AIDS. Because of the long time lag between the initial infection with HIV and the onset of clinical symptoms of AIDS, most HIV positive people generally feel quite normal. Unaware of that they are infected with HIV, they continue to spread the virus to others. As there is no vaccine against HIV and no effective medical cure for its infection, HIV awareness and prevention programmes are the only means to prevent millions of infections and premature deaths in India. Instructional media having the potential to realise the instructional objectives effectively can be exploited in HIV awareness and prevention programmes. However, the value of an instructional medium lies not only in its economic viability and its technical and pedagogical soundness, but in its adoption to the local, social and cultural environment also. Owing to the seriousness of the speed with which this epidemic spreads in the society, it is imperative to identify the relative effectiveness among different instructional media in modifying the cognitive
and affective behaviour in prevention and control of AIDS and be benefitted of the same as quickly as possible. Hence, the investigator has taken up the study on "Effectiveness of Instructional Media in Modifying the cognitive and affective behaviour in prevention and control of Acquired Immuno Deficiency Syndrome (AIDS).

SCOPE OF THE STUDY

The relative effectiveness among different instructional media in modifying the cognitive and affective behaviour and their retention among undergraduate students with regard to AIDS epidemic was established in this study. It was also studied whether the linguistic and cultural background of the media materials had any influence in determining their effectiveness in modifying the cognitive and affective behaviour and their retention among undergraduate students with regard to AIDS epidemic. The media materials availed in the study were also evaluated by a team of experts and others using a specially developed evaluation performa for each of these materials. In conjunction with other media researches in AIDS education, this study also contributes to the knowledge of effective instructional media in AIDS education programs.

OBJECTIVES OF THE STUDY

The objectives of the study are stated as follows:

1. To find out whether the different instructional media viz., Video, Audio, Slides, Posters and Lecture method are effective in modifying the cognitive and affective behaviour among undergraduate students with regard to AIDS epidemic.

2. To find out whether there is any significant difference between Lecture method and different instructional media viz., Video, Audio, Slides and Posters in terms of their effectiveness in modifying the cognitive and affective behaviour among undergraduate students with regard to AIDS epidemic.
3. To establish the relative effectiveness among different instructional media viz., Video, Audio, Slides and Posters in modifying the cognitive behaviour among undergraduate students with regard to AIDS epidemic.

4. To find out whether there is any significant difference among different instructional media viz., Video, Audio, Slides and Posters in terms of their effectiveness in modifying the affective behaviour among undergraduate students with regard to AIDS epidemic.

5. To find out whether there is any significant difference between Lecture method and different instructional media viz., Video, Audio, Slides and Posters in terms of their effectiveness in enhancing retention to cognition and attitude with regard to AIDS epidemic as measured by the retention test.

6. To find out whether there is any significant difference among different instructional media viz., Video, Audio, Slides and Posters in terms of their effectiveness in enhancing retention of cognition in AIDS epidemic as measured by the learners' performance in the retention test.

7. To find out whether there is any significant difference among different instructional media viz., Video, Audio, Slides and Posters in terms of their effectiveness in enhancing retention of attitude towards AIDS epidemic among undergraduate students as measured by the retention test.

8. To find out whether the linguistic and cultural background of the Instructional media materials on AIDS epidemic have any significant influence in modifying the cognitive and affective behaviour among undergraduate students with regard to AIDS epidemic.

9. To develop and standardize a Criterion Referenced Test in AIDS awareness and an Attitude Scale with regard to AIDS epidemic.

10. To develop an evaluation performa in validating the media materials developed by different agencies who work in control and prevention of AIDS epidemic.
11. To validate the media materials developed by different agencies who work in control and prevention of AIDS epidemic.

12. To suggest measures for improvement of the quality of the instructional media materials, so as to realize the envisaged objectives of AIDS educational programs.

HYPOTHESES OF THE STUDY

The hypotheses of the study are stated as follows:

1. There is significant difference between the means of pre and post-test scores of the students of the groups of Lecture Method and different instructional media viz., Video, Audio, Slides and Posters in cognition of AIDS epidemic.

2. There is significant between the means of pre and post-test scores of the students of the groups of Lecture Method and different instructional media viz., Video, Audio, Slides and Posters in their attitude towards AIDS epidemic.

3. There is significant difference among Lecture Method and different instructional media viz., Video, Audio, Slides and Posters in modifying the cognitive behaviour among undergraduate students with regard to AIDS epidemic.

4. There is significant difference among Lecture Method and different instructional media viz., Video, Audio, Slides and Posters in their effectiveness in modifying the affective behaviour among undergraduate students in AIDS awareness.

5. There is significant difference among Lecture Method and different instructional media viz., Video, Audio, Slides and Posters in their effectiveness in terms of retention of cognition with regard to AIDS epidemic as measured by the retention test.

6. There is significant difference among Lecture Method and different instructional media viz., Video, Audio, Slides and Posters in their effectiveness in terms of retention of attitude towards AIDS epidemic as measured by the students' performance in the retention test.
7. The effectiveness of an instructional medium is influenced by the linguistic and cultural background of the media material in modifying the cognitive behaviour among undergraduate students in AIDS awareness.

8. The effectiveness of an instructional medium is influenced by the linguistic and cultural background of the media material in modifying the affective behaviour among undergraduate students towards AIDS epidemic.

9. The effectiveness of an instructional medium is influenced by the linguistic and cultural background of the media material in enhancing retention of cognition in AIDS epidemic among undergraduate students as measured by the retention test.

10. The effectiveness of an instructional medium is influenced by the linguistic and cultural background of the media material in enhancing retention of attitude towards AIDS epidemic among undergraduate students as measured by the retention test.

TOOLS USED IN THE STUDY

The following tools were used to collect the required data in the study:

1. An interview schedule was developed by the investigator to find out the demographical variables, participation in AIDS awareness programmes, sources of information with regard to AIDS epidemic and mass media exposure of the undergraduate students.

2. Video, Audio materials in AIDS awareness developed by different National and International agencies working in the area of prevention and control of AIDS epidemic.

3. Slides and posters dealing with AIDS epidemic developed by Tamil Nadu State AIDS Cell, Chennai.

4. A Criterion Referenced Test in AIDS awareness was developed by the investigator within the scope of the contents of the media materials availed in the
study. This criterion referenced test is comprised of 50 items in multiple choice type covering the different aspects of AIDS epidemic viz., general awareness, mode of transmission, high risk group, preventive measures, controlling strategies, care taking towards affected people etc.

5. An attitude scale towards AIDS epidemic was also developed by the investigator. This attitude scale is comprised of 35 statements revealing both positive and negative attitudes towards AIDS epidemic.

6. An evaluation performa was developed by the investigator to validate the media materials availed in the study for their technical and pedagogical appropriateness.

METHODOLOGY OF THE STUDY

Pre-test, post-test non-equivalent groups design was found to be the most appropriate experimental design to test the formulated hypotheses in the present study. Seven groups of undergraduate students studying in different colleges in the city of Coimbatore were formed as the subjects of the control and experimental groups. The subjects in the control and experimental groups range from 35 to 55. The entry behaviour, cognitive and affective, of the students of all these groups with regard to AIDS epidemic was found out as measured by the pre-test.

One of these groups was treated as control group while the other groups were treated as experimental groups. Lecture method was adopted in the control group while instructional media viz., Video (English), Video (Tamil), Audio (English), Audio (Tamil), Slides and Posters were adopted as experimental intervention in respective experimental groups. The media materials covering the different aspects of AIDS epidemic were availed for instructional purpose in the experimental groups. At the same time the same message was introduced to the control group through the lecture method using ordinary Audio Visual aids.
A Criterion Referenced Test and an Attitude Scale with regard to AIDS epidemic were developed and standardized by the investigator. The criterion referenced test and the attitude scale were administered as pre-test and post-test to all the groups before and after the experimentation. The same criterion referenced test and the attitude scale were again administered to all the groups as retention test one month after the experimentation was over.

An evaluation performa was developed in validating the media materials availed in the study for their technical and pedagogical appropriateness. All the media materials were evaluated by a team of experts using the said proforma. The reliability and validity of the measuring instruments viz., criterion referenced test in AIDS awareness and attitude scale towards AIDS epidemic were established following appropriate procedures.

The mean and SD of the scores of the students in achievement in AIDS awareness and attitude towards AIDS epidemic as measured by the Pre, Post and retention tests were computed for all the three groups. The formulated hypotheses were tested using appropriate statistical techniques.

DELIMITATIONS OF THE STUDY

The delimitations of the study are as follows:

1. The homogenity of the Control and Experimental Groups was established only with respect to the scores of the participants on the pre-tests with regard to AIDS awareness and attitude towards AIDS epidemic. The intervening variables like anxiety, fatigue, motivation, intelligence etc. were not taken into consideration while establishing the homogenity of the Control and Experimental Groups.
2. Though a series of objectives related to the knowledge, attitudes, skills, values, etc. are important to be developed among the undergraduates in the context of prevention and control of AIDS awareness, due to felt difficulties in measurement of some of the variables, it has been decided to assess the effectiveness of the instructional media in terms of knowledge and attitude alone.

3. For want of funds, as well as time, it was decided to use readily available media materials prepared by different agencies working in the area of prevention and control of AIDS epidemic for the conduct of the present study.

**A BRIEF RESUME OF SUCCEDING CHAPTERS**

A conceptual framework with respect to different instructional media is given in the second chapter.

An account of some of the previous studies related to the present investigation conducted in India and abroad is given in Chapter III.

The fourth chapter deals with methodology adopted in the study describing the different tools availed in the study, profile of the sample comprising control and experimental groups, conduct of the experiment, validation of the media materials availed in the study and the establishment of reliability and validity of all the tools used in the study.

An analysis and interpretation of the data along with hypotheses testing are given in the Chapter V.

The last chapter summarized the findings and conclusions of the study besides providing recommendations for effective use of media in AIDS awareness programmes along with suggestion for further research in the same area.