

COMBATING THE HIV/AIDS PANDEMIC THROUGH MULTIFACETED HEALTH INFORMATION TECHNOLOGY

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ABSTRACT

HIV/AIDS is an incurable viral infection. To date, it is a global phenomenon. However, the scourge appears to be more pronounced in developing countries, like Nigeria. This paper discussed four broad variables responsible for the said pandemic disease namely; a.) mass illiteracy/wide-spread ignorance of the epidemiology of the disease, b.) poverty, c.) cultural practices and d.) unprotected sexual adventures. Specific media for HIV/AIDS transmission were also discussed which include cultism, traditional medicine procedures; tattooing/tribal marks, implantation of charms into the body for immunity purpose; medical insemination, blood transfusion, etc. It showed that the disease has elastic incubation period, with negative impacts on the home, the community and the nation from social, psychological and economic perspectives. The conclusion was that priority should be given more to HIV/AIDS prevention/control rather than to its medical cure. Therefore, utility of multi-faceted health education processes via the use of audio aids, visual aids and a combination of audio-visual aids - in schools, homes, village squares and public libraries were highly recommended to reduce its prevalence. These have three objectives of bringing about positive changes in the “awareness”, “attitude” and “behaviour” of people regarding HIV/AIDS transmission and control mechanisms.

Keywords: HIV/AIDS, testing, counseling, therapy, integration.

INTRODUCTION

Anti-bodies in the blood grant immunity to human body against specific disease infections. HIV/AIDS, however, destroys this immune system which makes its victims susceptible to several opportunistic diseases. The AIDS virus which is believed to have originated from the Chimpanzee (Gao*et al.*, 1999), has assumed a global spread that prompted a special session of the United Nations in New York to come up with a declaration calling for a global action against the disease (Daily Champion of Nigeria, 2001).

The scourge of HIV/AIDS appeared to be highest in Africa (N’Galy & Ryder, 1988; Laga, Nzika & Goeman, 1991). Okafor (2002) quoted Sagbama (2001) who stated that by the end of the year 2000, the scale of HIV AIDS epidemic in Africa was 15 times that of North America, and 37 times that of Western Europe. Okafor (2002) further asserted that UNAIDS and WHO (2007) estimated that 33.2 million people were living with HIV/AIDS worldwide, and 2.1 million people lost their lives due to the disease. Sadly, more than three quarters of those deaths were recorded in Africa, especially in the South of Sahara.

BACKGROUND AND LITERATURE REVIEW

HIV/AIDS Transmission Media.

1. HIV/AIDS transmission occurs through direct contact of a person's mucous membrane, with another person's HIV-infected body fluid such as blood, vaginal fluid, seminal fluid/semen (Centres for Disease Control and Prevention, 2003; and San Francisco AIDS Foundation, 2006). According to Nwachukwu and Nwachukwu (2009), HIV/AIDS transmissions occur most commonly through unprotected sexual relationship between partners, where one is HIV-positive. This could be casual sex arising from temporary infatuation; commercial sex precipitated by poverty, etcetera. Other HIV/AIDS transmission media according to WHO (2001) include:
 - (a) **Tattooing**/making of tribal marks.
 - (b) **Blood Covenant**: In some communities, the establishment of an agreement binding two or more persons together is not done in writing, but by extracting and sucking each other's blood.
 - (c) **Traditional Medicine Practice**: Solution offered by some traditional medicine men to the health problems presented by their clients may include making incisions on parts of the body to either suck out "bad blood" or implant "charms", to protect them from "evil forces".
 - (d) **Traditional birth attendants**: The exposure of expectant mothers to the same "labour room" where the blood stains of the women who previously delivered their babies may not have been sanitarily cleaned up; the use of unsterilized delivery kit; and the circumcision of babies with non-disposable instruments invariably constitute possible avenues for HIV/AIDS transmission.
3. **Blood Transfusion**: Transfusion of blood, which may turn out to be seropositive, has been responsible for 5-10% of the World's HIV- infections (WHO, 2001).
4. **Injection Needle**: According to the WHO and UNAIDS (2003) the use of unsterilized and non-disposable needles have been responsible for about 20.5% of all HIV infections in Africa, especially the South of Sahara,
5. **Miscellaneous modes of spread**: other contributory factors to HIV/AIDS transmission include: the common use of needles and syringes by intravenous drug addicts (Fan *et al.*, 2005); mother-to-child transmission which could be up to 25% during the gestation, labour and delivery periods (Coovadia, 2004) as well as in-vitro fertilization.

Further transmission media are the use of unsterilized needles for acupuncture; vaccination; piercing of the pinna or nose for wearing ornamentals as well as hair-shaving with contaminated razor blades or clippers (Nwachukwu,2002).

Effect of HIV/AIDS:

The disease has multidimensional effects on its victims:

Psychologically, the AIDS victim is traumatized and frustrated by the thoughts that his plans and aspirations in life may never be realised because his life expectancy may be threatened by the myriad of opportunistic infections he may suffer from.

For the family of the AIDS victim, there is a feeling of terrible shame that follows them wherever they go, like an ominous shadow.

In the Nation, an epidemic of HIV/AIDS affecting a large segment of the reproductive population, may weaken the work force and reduce economic output (Bell *et al.*, 2003).

AIMS OF THE STUDY

The objective of the current paper is to examine potential causes and possible solutions that can be drafted in reducing the number of people afflicted with HIV/AIDS. Specifically, the following question will be answered in this article:

Research Question I

What are the possible sources of HIV/AIDS virus?

Research Question II

What are the practices where HIV/AIDS can be acquired?

Research Question III

What are methods that can be utilized in combating the increasing number of HIV/AIDS cases in Nigeria?

DISCUSSION

Intervention

Since both complete medical cure and immunity from the disease are not possible for now, prevention of exposure to the HIV-virus becomes the best control measure against the disease (Hel *et al.*, 2006). If this control measure is to be effective, then the general public must be adequately informed about HIV/AIDS disease, its modes of transmission, and control techniques. This is where Health Information Technology comes in.

Health Information Technology and HIV/AIDS Control

The tripodal objectives of health information/education are the promotion of positive changes in people's **knowledge** about certain health issues, positive changes in their attitudes about such health issues and the engendering of positive health **behaviour** that will enhance healthful living and longevity. According to Udoh (1999) and Nwachukwu (2002), these objectives are applicable to HIV/AIDS control through the following health information techniques.

I. *The Lecture Method*

This is a formal information-delivery process. It involves a teacher-learner relationship. Here, the health educator addresses his audience, on everything they need to know about HIV/AIDS – its modes of transmission, consequences and prophylactic measures against it. The major advantage of this health information technique is that it provides the audience with detailed knowledge about every aspect of the disease; particularly the fact that, for now HIV/AIDS is incurable. The lecture method, however, has its own snag. The technique appears to be “authoritarian” in nature, with the “active” educator addressing “passive” listeners. Little or no

opportunity is available for the learners to express their own thoughts; or make their contributions to the learning process.

II. The Discussion Method

This Discussion technique makes up for the shortcomings of the lecture method. It adopts the round table approach where everybody present has all the liberty to express his feelings about HIV/AIDS; ask questions on any aspect of the disease that may be unclear to him, and make his own contributions to the issue at hand. Participants may wish to know, for example, if PLWHAS should be denied the opportunity for job placement by employers, purely on the basis of their HIV status. The discussion moderator, who should be a competent counsellor cum health educator, listens to the issues raised by some participants, listens to the reactions/contributions by other participants, and then provides professional explanations and recommendations regarding the issues discussed. The merit this technique has over the lecture process is that the discussions usually take place under a non-threatening/relaxed atmosphere. Issues are exhaustively discussed. Fears are allayed and needed clarifications are made. In the end, decisions taken on HIV/AIDS control efforts are binding on all participants because the decisions taken were arrived at through their internal conviction rather than external coercion.

III. The Group Project Technique

This health information process is one step ahead of the discussion technique. It tends to put into practice the outcome of decisions arrived at during the discussion session. If a decision was taken, for instance, that “Mass Campaigns” or “Public Health Campaigns” should be carried out against HIV/AIDS transmission in urban and rural communities, a Health Education Team (HET) in the area of HIV/AIDS control will invite and arrange leaders of recognised social institutions and corporate bodies into groups. In the case of a rural community, these could be leaders of family-groups, age-groups, trade unions, various churches, cooperative societies and representatives of other relevant bodies. The Health Education Team (HET) from government health establishments would then give the invited persons all required training on the process of providing information on HIV/AIDS to the masses in their respective domains. This is a kind of “Train-the-Trainers” health information technique. Its major merit is that in some countries, particularly the developing nations, the ratio of professionally trained health education personnel to the masses is marginal. The train-the-trainers programme therefore helps to raise an auxiliary team of health educators, to act as “FACILITATORS”. These facilitators would then commence the dissemination of information on HIV/AIDS transmission and control processes to members of various associations and communities they represent. Additional merit of this project method of health information in rural communities where a high population of illiterates usually reside is that the facilitators would be able to present the villagers all information in the vernacular language. The Health Education Team should periodically visit the different groups of facilitators on their various locations during their health information sessions. That will raise the morale of the facilitators; and boost the confidence of the masses on the activities of the facilitators. From time to time, both the government Health Education Team (HET) and the facilitators in all groups will meet to review the progress made so far, identify possible shortcomings and new challenges; and then plan new strategies for subsequent phases of the mass health information programme (Nwachukwu, Egenegé & Nwchukwu, 2007). This health information technique was adopted with great success by this writer and his colleagues in

carrying out a health education programme on HIV/AIDS control mission in four rural communities in Ndokwa Local Government Area of Delta State, Nigeria, in 2007.

IV. Distribution of Printed Materials

Government, private/corporate establishments and individual philanthropists should be encouraged to provide financial and other logistic support for the dissemination of information on AIDS, through print and electronic media. These include:

- i. *Text Books:* These should be deposited in school and public libraries for people to read and acquire detailed information on HIV/AIDS, at their convenient times.
- ii. *Journals/Research Publications:* These should also be made available in school and public libraries to provide readers with up-to-date information on HIV/AIDS Transmission and control processes, arising from recent scientific investigations.
- iii. *Posters:* These should be prepared and placed at strategic locations like hospitals, schools, maternity homes, market places, “red district” areas, conference centres and other notable locations visited by a large number of persons every day. Information in such posters should be short, and concise. It should be written in simple English, or other language that will be easy to understand in specific localities. The lettering should be in bold characters that can be easily read, even from an appreciable distance. Examples: “HIV/AIDS HAS NO CURE.” “SHOW LOVE AND CARE TO PEOPLE LIVING WITH HIV/AIDS”. “AVOID UN-PROTECTED SEX, USE CONDOM”, “AVOID MULTIPLE SEX-PARTNERSHIP”, “SEX ABSTINENCE IS THE BEST PREVENTION AGAINST HIV/AIDS DISEASE”, etc. Posters could contain statements only, or a combination of statements and diagrams/illustrations. Above all, posters should be attractive enough to draw people’s attention and should be regularly changed to prevent them from becoming stale and subsequently ignored.
- iv. *Handbills:* These are modified forms of posters. The differentiating factor between the two is that while posters are large and placed in permanent locations to serve the public, handbills are much smaller and so portable as to be carried from place to place by individuals. So, they can read and pass the handbills on to their friends.

V. Involving the Electronic Media

- i. *Radio Programme:* The health information techniques discussed above serve a fairly limited group of people in specific venues. The radio programme technique on the other hand, has the much greater advantage of reaching out, and educating a far larger population of people nationally, and even internationally, at the same time. The radio is cheap and available in almost every home. People could, therefore, remain in the comfort of their homes and receive all available information on HIV/AIDS transmission and prevention processes from the health educator at the radio station. To make the radio programme information technique more effective and dependable, broadcasting should be made in both the lingua-franca and vernacular languages. This is for the benefit of both the literate and non-literate segments of the population.
- ii. *Tape Recorder and Cassettes:* All necessary information on HIV/AIDS can be recorded on tapes and made available for sale to the public. Individuals/organizations could then buy and play them back at their convenient times to acquire in-depth information about the disease.

- iii. **Television:** This medium for health information, apart from serving a large audience, has an edge over the radio technique. It is a combination of the audio and visual techniques. So, while the radio health educator is invisible to the listener, the television presenter and his gesticulations, pictures or illustrations are visible, to help the listener have better comprehension of the information he is receiving.
- iv. **Film-Shows:** Dissemination of Health information on HIV/AIDS through film shows could be done through televisions and video tape recorders. It could also be through the use of projectors and screens in halls or open places, for a specific audience. Either way, the real pictures of individuals living with HIV/AIDS are displayed on the screen. The various processes or actions that contribute to HIV/AIDS transmission; as well as the consequences of the disease on the individual, the home, the immediate society, the nation and the international community are highlighted and made clearer to viewers. Unlike other visual techniques of health information, film shows appear to have greater impacts on an audience than the radio, and other purely audio techniques of health information. The reason is that what one SEES usually remains longer in one's memory than what one merely HEARS about (Nwachukwu, 2002).

Other Health Information Techniques

6. **Field Trips** – Arrangements could be made to take a group of people to hospital wards, or other health institutions where patients living with HIV/AIDS (PLWHS) are receiving medical attention. Seeing these patients physically will serve two major purposes. One: the pitiable condition of those down with full blown AIDS will likely give the visitors a clearer picture of the devastating effects HIV/AIDS could have on its victims. They will, therefore, be so emotionally touched as to develop a much greater appreciation of the NEED to do everything possible to prevent people, including themselves from engaging in actions likely to expose them to HIV/AIDS transmission. Two: the visitors will witness how the health workers relate closely and freely with the PLWHAS. They will therefore learn how to accommodate and integrate PWLHAS in the wider society, rather than discriminating them and adding to their psychological problems
7. **Incidental Teaching:** This is an unplanned health information technique. The health educator simply catches in on a health risk someone has taken; or is about to take, and promptly educates him on the negative consequences of such action; and why he should put a stop to such a risky action. Incidental health information could, for example, be given to somebody about to willingly receive blood transfusion from a donor whose HIV/AIDS status has not been tested; or to somebody who gleefully announces to his friend that he has just had fun through unprotected sex with his partner. By the time such people acquire better **knowledge** of the fact that those are avenues for HIV/AIDS transmission, they may develop a more positive change of **attitude** that will make them desist from engaging in those risky health **behaviours**, forthwith.
8. **Dramatisation:** Some HIV/AIDS transmission media, such as the use of a single injection needle and syringe by a group of drug-addicts or cultists could be dramatised on stage before a large audience. The drama could show how only one, or two members of the group were HIV-positive initially; and how almost all members of that group later tested HIV-positive after a prolonged period of common use of the same syringe and needle for intravenous drug injections. In the same way, the possible transmission of HIV/AIDS to patients in hospitals or

chemist shops with the use of non-disposable, and non-sterilized injection needles and syringes could be dramatised, as a teaching process.

9. **Guest Speaker Technique:** Information on HIV/AIDS transmission and prophylaxis could be further done by inviting guest-speakers who are professionals in that field of study to deliver lectures to an audience. This health information technique is particularly useful in institutions of learning. Students who became used to or possibly bored with seeing the same set of teachers/instructors everyday usually become excited when they hear that “an expert” will be coming to deliver a lecture in their school assembly hall. As hero-worshippers, most, if not all the students, will attend the lecture, and go home with authoritative health information on HIV/AIDS transmission and prevention processes.
10. **Seminars, Conferences and Workshops:** These are versions of the “Guest-Speaker” health information technique, but they are organised at a much higher level. Unlike students who had little, or no previous information on the subject of HIV/AIDS, participants in seminars, conferences or workshops are mostly scholars/professionals in that area of health. Most participants come and deliver well-researched or scientific papers individually on different aspects of the HIV/AIDS diseases.
11. **Use of Town-Criers:** In rural communities, town-criers are immensely useful. They help to pass information to villagers on the days, and venues that the government Health Education Team, (or facilitators) would be coming to address the people. They move easily to all the nooks and crannies of the community; beat their gongs, and deliver their messages in the local language, for easy comprehension. However, for a large turnout of villagers for such health information meetings on HIV/AIDS transmission and control to be guaranteed, the meetings should not be slated to take place on market days. Most villagers will be away from the market. On other days, the health information meetings should not be scheduled to take place in the morning, but in the evening when the villagers must have come back from their farms, and other businesses.

CONCLUSION AND RECOMMENDATIONS

Ignorance of the causative factors of HIV/AIDS appears to be largely responsible for several unhealthy socio-cultural practices/behaviour that enhance the spread of this pandemic. Permanent cure for the disease does not exist for now. Therefore, prevention of its transmission remains the best option against that health problem.

Prevention as a control measure can be achieved through the application of appropriate Health Information Techniques (HIT) such as the use of the print, electronic and cultural media. The greatest merit in these HIV/AIDS control strategies is that “Health information/Education” is an indispensable component of Primary Health Care (PHC) delivery. It is cheaper and more effective than curative healthcare which is not only costly, but also not a guaranteed treatment for HIV/AIDS disease.

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