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COMMUNITY SERVICES

Librarians and the use of information communication technologies in the provision of HIV/AIDS information in developing countries

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Introduction

Health care is among priority sectors in developing countries, especially in Africa. Many people perish daily from infectious and other diseases due to poor health care conditions. There seems to be a great potential in using Information and Communications Technologies (ICTs) to save human lives by improving health delivery and access to much needed information on HIV/AIDS.

On the other hand, the challenges faced by medical research today are well known. As you are all aware, HIV/AIDS has emerged as the international health crisis; "HIV/AIDS is not just an individual tragedy. It is also threatening to decimate the future prospects of most developing countries, wiping away years of hard-won improvements in development indicators. As a result of the disease, we are witnessing deterioration in child survival rates, reduced life expectancy,

crumbling and overburdened health care systems, the breakdown of family structures and the decimation of a generation in the prime of their working lives" (http://www.wdm.org.uk/campaigns/cambriefs/debt/aids.htm).

"Sub-Saharan Africa is the region of the world that is most affected by HIV & AIDS. An estimated 25.4 million people are living with HIV and approximately 3.1 million new infections occurred in 2004. In just the past year the epidemic has claimed the lives of an estimated 2.3 million people in this region. Around 2 million children under 15 are living with HIV and more than twelve million children have been orphaned by AIDS

The extent of the epidemic is only now becoming clear in many African countries, as increasing numbers of people with HIV are now becoming ill. In the absence of massively expanded prevention, treatment and peaking around the end of the decade. This means that the worst of the epidemic's impact on these societies will be felt in the course of the next ten years and beyond. Its social and economic consequences are already being felt widely not only in health but in education, industry, agriculture, transport, human resources and the economy in general" (http://www.avert.org/aafrica.htm).

From the above, it is of paramount importance that information on HIV/AIDS is collected and disseminated to policy makers, health professionals and donors and the use of information communication technologies can enhance this. Ready availability of up-to-date information enables timely and informed decision-making, as well as efficient allocation and mobilization of resources.

Information Communication Technologies is defined as "the building blocks of the Networked World" As noted by UNDP, "ICTs represent the combination of microelectronics, computer hardware and software, telecommunications, and opto-electronics such as microprocessors, semiconductors and fiber optics, that enable the processing, and storage of huge amounts of information, and its rapid dissemination through computer networks. These innovations enable the processing and storage of enormous amounts of information, along with rapid distribution of information through communications network" (UNDP Human Development Report 2001, p30).

From the above, Information Communication Technologies include telecommunications technologies such as telephony, cable, satellite and radio, as well as digital technologies, such as computers, information networks and software.

"There is no doubt about the profound impact made by information and communication technologies (ICT) on our professional and non-professional life. Tertiary institutions in particular, are not only faced with the challenge of trying to be competitive and equip people to make the transition to an information economy, they have had to make the changes under increasingly stringent economic conditions due to continual reduced funding from government" (Macchiusi and Trinidad 2001)

Uhegbu (2000) asserts, "Communication networking is increasingly becoming the trend in the information world, whether it is done among groups or persons sharing more or less the same

circumstances or among organizations sharing more or less the same functional activities. The major benefits to be derived from networking are improvement to the existing services; the speedier transfer of information, improved management effectiveness and increased staff productivity.

The Internet, which is today the most sophisticated and modern way of interactive networking, has offered global access to all kinds of information generation and sharing across the world, thus reducing the world to a global village. Through the Internet, one can record, access, search and retrieve information anywhere in the world in minutes (Uhegbu 2000).

The Oxford Concise Medical Dictionary defines HIV as "Human immunodeficiency virus, a retrovirus responsible for AIDS" (The Oxford Concise Medical Dictionary, 6th ed., 2002, p320).

The New Penguin Compact English Dictionary defines HIV as " human immunodeficiency virus, a retrovirus, and virus containing ribonucleic acid, that breaks down the human body's immune system and is the cause of Aids" (The New Penguin Compact English Dictionary, 2001, p418).

From the above definitions, HIV is a virus, which causes the Acquired Immuno-Deficiency Syndrome (AIDS).

The Oxford Concise Medical Dictionary defines AIDS as "acquired immune deficiency syndrome, a syndrome first identified in Los Angeles in 1981. The virus destroys a subgroup of lymphocytes, resulting in suppression of the body's immune response. AIDS is essentially a sexually transmitted disease, either homosexually or heterosexually. The two other main routes of spread are via infected blood or blood products and by the maternofetal route. The virus may be transmitted from an infected mother to the child in the uterus or it may be acquired from maternal blood during parturition, it may also be transmitted in breast milk" (The Oxford Concise Medical Dictionary, 2002, p15).

From the above AIDS is a disease of the immune system, caused by the human immunodeficiency virus, usually leading to death from infections that the body is no longer able to resist.

From the definition of Information Communication Technologies, it is evident that today Information Communication Technologies have taken many forms, which include the following:
- Electronic Mail
- The Internet
- Mobile Telephone
- Radio
- Telephone (land line)
- Satellite Television.

Information Communication Technologies can be a powerful tool in providing information on supporting the response to HIV/AIDS. This can be achieved through:
- E-mail; websites; CD-ROM

- Information provision, databases, documentation and library access

- List-serves & online discussions

- Web-based discussion groups, workshops & symposia

- Networking

- Information sources, question and answer sites (e-mail or web) and chat rooms for personal support/information

- Online publications

- Distance education

- Video-conferencing

- Involvement with community organizations.

With all the above, librarians can collect, repackage and disseminate information on HIV/AIDS to different sectors in their relevant countries and with all this information I am convinced that the impact of HIV/AIDS in developing countries will be reduced.

The question that remains is, can librarians and the use of information communication technologies really make a difference in providing information on HIV/AIDS?

ICT and provision of HIV/AIDS information in Developing Countries

The use of Information communication technologies has grown relatively rapidly in some developing countries as outlined below.

Lorete (2003), argues that whilst the Internet is the current media of choice for quick, real time exchanges of information or discussions via websites or e-mail, it is crucial that we maximize the Internet according to our needs. Lorete further argues that easy access to information is excellent but it can also be overwhelming. Providing user-friendly support services therefore becomes critical. The Asian Harm reduction Network (AHRN) was conceived because of the need to link people and resources involved in HIV/AIDS prevention.

"The AHRN Secretariat in Thailand serves as a hub in order to carry out its mandate: networking, advocacy, information sharing, training, and programme and policy development for people keen on promoting health among individuals who use drugs. Since 1999, the AHRN clearing house has been collecting and digitizing resources which became available a year later from the Information Sharing Facility at www.ahrn.net. Access generated (free) memberships and members also received the AHRN newsletter by regular mail. The ahrn-list-a discussion group hosted at yahoo groups- also sent out news and queries and responses.

Our members are a niche of people interested in one thing: drug use and HIV/AIDS in Asia. With these services, we captured their interests." (Lorete 2003).

Recently, AHRN embarked on a programme of "replying to inquiries promptly, keeping a keen eye on vital issues and establishing relationships with individuals and organizations who are key players in harm reduction in the region. Keeping in mind that not everyone is wired to the Internet, the AHRN newsletter started reporting on key issues in the field (policies, programme, advocacy) and extended its network bulletin with country updates, regional meeting reports, current news, etc" (Lorete 2003).

Librarians in developing countries can therefore have access to HIV/AIDS information being collected through initiatives like the AHRN and make it available to people. This information can be repackaged to meet the information needs of different target groups to make sure that people are not disadvantaged.

In Kenya AfriAfya, African Network for Health Knowledge Management and Communication was established in 2000. Afriafya is an organization of health Non-Governmental Organizations, the Ministry of Health and interested individuals in Kenya. These groups met at a workshop in April 2000 to deliberate on how ICT could be harnessed for community health and a consortium called AfriAfya was established.

"AfriAfya, African Network for Health Knowledge Management and Communication, is an initiative established in April 2000 by Kenya-based health development agencies to explore new opportunities for harnessing communication and information technology for community health. The idea for AfriAfya was based on the realization that while modern ICTs had provided commercial entities, universities, ministries, research institutions and big hospitals with information and assistance in their activities, it had done very little for rural communities, particularly rural Kenyan and African communities in the area of health" (Nyamai 2002).

"AfriAfya was established to explore practical means of "harnessing ICT for community health", and turning all the good ideas often expressed in this field into practical, useful reality on the ground. It aims at improving health through increasing the availability of relevant up-to-date health information in target communities. It recognized that while there is an abundance of health information in the world today, there is a very severe scarcity of health information in most Kenyan rural settings, and is working to improve this" (Nyamai 2002)

AfriAfya set up a small coordinating hub and seven field centers selected from existing community-based health intervention sites run by the participating groups. "Communication was established between the hub and each of the Partner Agencies and field sites, and between the different field sites. Each of these sites were equipped with a computer, its operating software, printer, data modem, WordSpace receiver and PC adaptor card, and three to four staff from each of these sites trained in the use of this equipment. One site was additionally equipped with a television and video and various health videocassettes. Solar panels have been used to power the equipment where there is no electricity" (Nyamai 2002)

Librarians in conjunction with health practitioners can use the above concept to disseminate HIV/AIDS information. There are libraries in both urban and rural areas in some developing countries. These libraries can be linked to a major medical library in the country just like in the case of the AfriAfya project. An outreach librarian at the medical library does all the literature

searches on HIV/AIDS for the various libraries in the country and sends the information by e-mail. This information is then repackaged for the ordinary person to understand. For people in the rural areas, a trained librarian, for the benefit of the rural illiterate can translate the information into the local languages. The librarians can also make use of power-point presentations in the local language to effectively disseminate the much - needed information. Videotapes from various organizations dealing with issues of HIV/AIDS can be sourced through the major medical library and distributed to various libraries in the country. These can be shown to the gatherings and the librarian or trained personnel interpret the proceedings for the benefit of many. Days can be organized when people can gather to be educated about HIV/AIDS. In the urban areas this can be done in municipal halls and in rural areas at schools in order to accommodate a big crowd.

Librarians also need to take down questions and issues raised during the session and these are send back to the medical library where answers are sort from researches or practicing medical doctors and in the following sessions people's questions are answered and the process continues like that. There can also be suggestion boxes at shopping centers and schools where people can drop their questions. People in the community can be employed to collect these and the information send to the medical library through electronic mail.

Librarians can also train people who can understand simple English in townships and villages to use the computer and also how to operate the video tape recorder with HIV/AIDS information. The trained personnel can work hand in hand with the librarians and these can be used to interpret ate information on audiotapes, CD-ROMs and videotapes to the local language, hence the use of radio, computer and television to disseminate HIV/AIDS information. In this case information on developments in HIV/AIDS is disseminated and people are educated and at least have an idea of what is HIV/AIDS, how the disease is spread and how to live positively with HIV/AIDS.

In the case of Kenya, "there has been an increase in discussion of HIV/AIDS issues in communities in which it was previously very difficult to break the silence in these matters. Some of the communities are beginning to show a willingness to start dialogue about some of the high-risk cultural practices such as wife inheritance and various funeral rites. There is increase in condom uptake in some of the field centers, and increased demand for voluntary counseling and testing services in communities that were previously averse to the very mention of HIV testing. Community participation in health issues has increased, with bigger turnouts reported at community health meetings and health action days. While it is still too early to demonstrate improvement in health through the project activities, with these changes that are beginning to take place it is clear that if these continue there will be a definite impact on HIV transmission in these communities with the attendant improvement in health" (Nyamai 2002).

In South Africa, dissemination of knowledge and information on HIV/AIDS to the community has been identified as a key strategy for the future of South Africa. As a result, "the Mindset Health Channel was identified as a strategic and effective resource that could be used to reach a wide – ranging audience in rural and urban areas, and to improve the knowledge and skills of health care workers in managing HIV/AIDS related problems in South Africa. Selection of this project was based upon its anticipated outputs, project processes, sustainability and replicability, and the role of technology and technology transfer in its execution. Patients have the opportunity

to view important health information whilst waiting to be attended to in a health care center, unlike the previous situation when they would sit for long hours without any stimulation or useful information being made available to them" (Molefi 2004).

"The Mindset Health Channel is a pilot study, applying audiovisual and computer technology, implemented at 56 sites in all the nine provinces of South Africa, including urban, peri urban and rural environments. Activities undertaken by the participating organizations involved implementing a satellite broadcast channel through which HIV/AIDS information could be disseminated at health care facilities, by broadcasting daily to both patients/general public and also professional and lay healthcare workers. Data casting (forwarding and storing of data via an Internet protocol (IP) satellite platform) is being used to complement the broadcasts into sites, allowing users to view content stored on a local PC storage device "on demand" daily. This technology has empowered health professionals and lay counselors to access HIV/AIDS and related information via satellite transmissions using computers and TV screens installed in the health facilities for the patients. For the health professional workers a TV set and desktop computers are provided. The specific method employed enables (a) patients to view up to 100 hours of HIV/TB related content from appropriate media providers and consists of content packaged in the form of health news, with presenter introduction, health reports, drama, documentaries, public service announcements and educational programmes and (b) health professionals to view and access information stored in the computer in the form of videos" (Molefi 2004).

Librarians in developing countries can also go the South African way in providing HIV/AIDs information. In collaboration with journalist, librarians in developing countries can have a share in programmes like the South African Mindset Health Channel. As information specialists librarians can follow up on current researches being done on HIV/AIDS and educate people through the radio. They have to identify target groups and their information needs so that radio programmes are curtailed for different types of people. There can be radio programmes for teenagers, people already living with HIV/AIDS and those not yet affected. These can be educated on use of condoms, safe sex, antiretroviral drugs and living positively with HIV/AIDS. Research can be done through electronic mail by way of discussion groups or through list serves, the Internet and after repackaging; the same information can be disseminated through programmes like the Mindset Health Channel. Information can be disseminated in different languages, that is English and the local languages of the different countries. Listeners can be encouraged to forward questions through phone in messages and ready answers can be provided there and there and for those questions with no ready answers listeners can be encouraged to tune in the following week. For those with no access to the telephone, people can be encouraged to drop their questions in suggestion boxes at clinics and hospitals for information workers to collect.

In Kenya "Pastoralists regard the Radio as a very powerful and trusted source of information. Easy accessibility to radio and use of local languages makes it one of the widely adored means of information dissemination if compared to the other forms of media like the Television and the print media whose coverage and readership is limited" (http://www.itdg.org/?id=peace3_hiv).

From the above, the radio can be used as a powerful tool to provide HIV/AIDS information and

this can benefit a lot of people as 1 in 4 people in developing countries have a radio. (Jensen 2002).

It is also noteworthy to know that "Lesotho recently declared that all announcements for cabinet and committee meetings would be made only by email. Administrators such as those in South Africa, Algeria and Tunisia now provide immediate global access to tenders via the web. Health and education departments in many countries are beginning to electronically transmit operational MIS statistics such as disease occurrences and pupil registrations. In South Africa, the results of blood tests are being transmitted to remote clinics that are off the telecom grid via mobile telephone text messages. As greater numbers of public officials are now gaining low-cost access to the web, the vast information resources available via Internet are becoming increasingly important tools in ensuring informed decision-making" (Jensen 2002).

In Zimbabwe different forms of ICTs have been used to disseminate information on several health issues and the same can be done for information on HIV/AIDS. In Zimbabwe, SatelLife's HealthNet network is having a significant impact on institutional and national development in the health sector. The Health Net node in Harare provides low-cost e-mail and health information services to the health community. Raw data is sent electronically from the districts to the Provincial centers for analysis and compilation into summaries and charts, forwarded onto the Health Ministry, and then resent to the districts via Health Net. Ministry of Health officials use HealthNet to collect and disseminate weekly surveillance reports on epidemiology and disease control to health centers around the country. Ministry personnel also use HealthNet for many other professional purposes including ordering drugs from central stores and distributing assignments to students on field attachments.

In addition, other health professionals, including users in all major city health departments, blood transfusion services and several laboratories use Healthnet on a regular basis. Several of these work in the rural areas, and for them, HealthNet is their only viable e-mail connection.

The University of Zimbabwe, College of Health Sciences Library uses the HealthNet E-mail to disseminate information on different health issues to provincial hospitals. In turn health personnel in provincial hospitals also send their information requests to the Outreach Librarian who sends back the satisfied requests through the HealthNet E-mail. The College of Health Sciences Library also uses the Healthnet e-mail in a discussion group of malaria. There is even a notice board in the library where malaria up-dates are posted for the benefit of medical students and staff.

The same concept can be used to disseminate information on HIV/AIDS in developing countries. Librarians and Health professionals in provincial hospitals and rural areas can collaborate to repackage the information into the local languages and sessions can be organized once a week where people gather at the clinics and hospitals to be educated about HIV/AIDS.

Document delivery can also be an effective method of providing HIV/AIDS information. Librarians in developing countries can also utilize the document delivery to provide information on HIV/AIDS.

This has happened between the University of Zimbabwe, College of Health Sciences Library and

the National Library of Medicine (NLM). In 2002 the Multilateral Initiative on Malaria (MIM) document delivery project was started between the National Library of Medicine, the MIMcom and the University of Zimbabwe, College of Health Sciences Library (then Medical Library) to provide information on malaria. Eight countries namely Cameroon, Ghana, Kenya, Malawi, Nigeria, Tanzania, Uganda, Zambia and Zimbabwe were involved in the project. MIM stands for the Multilateral Initiative on Malaria and MIMcom is for the Communications Working Group of MIM. The National Library of Medicine heads up MIMcom for the United States and the NLM works with other partners who helped fund the telecommunications set up the satellite and other forms of telecommunication at malaria research sites in Africa. This enabled the research sites to have e-mail and Internet access One of the main requests from the research centers was that they would have access to journal articles. The NLM then set up a "pilot" project to provide document delivery for malaria-related research to these research centers. The University of Zimbabwe was chosen to become a DOCLINE library serving the MIM research sites. The main reason Zimbabwe was chosen was because at that time the College of Health Sciences Library had current subscriptions to over two hundred journal titles and long runs from previous years.

Requests were made through the MIMCom site and these were e-mailed to College of Health Sciences Library, which filled the requests through their own collection first and only sent to NLM for those items that were not available in the library. The University of Zimbabwe College of Health Sciences Library satisfied requests from other MIM libraries and helped order from the National Library of Medicine those materials not available in the College of Health Sciences Library.

When Health Internet for the Availability of Research Initiative (HINARI) was introduced, the University of Zimbabwe, College of Health Sciences Library would check if the article was available on HINARI and if so advice the requestor provided the requestor had access to HINARI. If not the College of Health Sciences outreach librarian would check in the collection, and if available would scan the document and send it through electronic mail to the relevant library.

The same could be done for articles with HIV/AIDS information. Negotiations can be made with the National Library of Medicine to carry out a similar project but this time focusing on HIV/AIDS and vast information on HIV/AIDS can be made available to research libraries who in turn will disseminate this information to the public by some of the means already discussed in the previous paragraphs.

University libraries in developing countries are also benefiting from the Program for the Enhancement of Research of Information (PERI) under the sponsorship of the International Network for the Availability of Scientific Publications (INASP). Through PERI, donors have paid subscription on behalf of libraries in Africa to access web-based journals (Chifwepa 2003). INASP has played an important role in providing developing countries with vast information on the Internet. Through the PERI's healthlink, Medical libraries in developing countries are able to access vast information on almost all health issues including HIV/AIDS. This information can be made available to researchers, students, staff and health practitioners in different parts of the country and can also be repackaged to benefit the rural folk. There is also a facility of document delivery and users have access to full-text journal articles.

Librarians can also train library users on accessing HIV/AIDS information (information literacy skills) so that searching information on the Internet is not a nightmare. With so much information, through the efforts of PERI and INASP, it will be sad to discover that librarians are not making an effort to train users to utilize this vast information.

The Southern Africa HIV and AIDS Information Dissemination Service (SAFAIDS), Zimbabwe is another vibrant organization in Zimbabwe which is using ICT to harness information on HIV/AIDS. "SAFAIDS promotes policy, research, planning and programme development in the Southern Africa Region. It works with NGOs, government bodies and international agencies to assist them in implementing responses to HIV/AIDS in a socioeconomic context" (http://www.safaids.org.zw).

The SAFAIDS Resource Center houses a wealth of information on HIV/AIDS and it focuses on the health and development aspects of the pandemic. SAFAIDS provides the following services:

- Document delivery electronically and by post
- Referral to other organizations
- Internet searches for HIV and AIDS information
- Capacity development in setting up HIV/AIDS resource centers
- Networking with other HIV/AIDS resource centers in the Southern region and internationally for information exchange and experience
- Literature searches from the resource center bibliographic database
- Video Viewing facilities
- Clearing house service for other organizations.

Among SAFAIDS units is the SAFAIDS Media unit which "acts as a catalyst for provision of accurate HIV/AIDS information and communication by partnering with the print and broadcast media at regional level. Its main objectives are to:

- Establish a network of key media players who can sustain interest and provide regular coverage of HIV/AIDS and related issues
- Develop information products, services and materials to meet the needs of different media organization
- Coordinate and conduct training workshops that develop skills to proactive reporting on HIV/AIDS in a sustained manner, and
- Share experiences of successful media on HIV and sexual health countries of the region.

"The media unit is a major source of information for communicators on the region and beyond. Media activities include timely production of pr (media packs in English and Portuguese) and radio productions, advocacy advisory relations on media development, media for an on HIV/AIDS, or training of journalists, e-group networking, and television/audio programmes. These activities aim to increase public debate on HIV/AIDS among media and information provides, promote accuracy in coverage and communicating HIV/AIDS, and strengthen partnerships on HIV/AIDS communication" (www.safaids.org.zw).

SAFAIDS also produces Media Information Packs as a way of raising awareness on HIV/AIDS.

SAFAIDS has produced Media Information packs on sex workers, living positively, AIDS in the workplace, men and AIDS, men who have sex with men and celebrating HIV/AIDS. Of late SAFAIDS has started printing the Media Information Packs in Portuguese in order to satisfy the needs of the journalist in Angola and Mozambique.

"Responding to an assessment of HIV/AIDS information available to the media in Southern Africa, the Southern Africa AIDS Information Dissemination Service based in Harare, Zimbabwe developed a set of media information packs in 1999. Journalists and editors from Zambia, Zimbabwe and South Africa had emphasized their need for user-friendly information on HIV/AIDS to assist them in their understanding, communication and coverage of HIV/AIDS and related issues. SAFAIDS distributed a pilot media information pack at a pre-International Conference on AIDS and STDs in Africa (ICASA) African Media Training Workshop in Lusaka, Zambia, in September 1999. Following positive feedback, SAFAIDS began full-scale production of its bi-monthly media pack. The purpose of the Media Information Pack on HIV/AIDS is to raise awareness and advocate for journalists to take an active role in disseminating information on HIV/AIDS" (www.safaids.org.zw).

This is proof that SAFAIDS, Zimbabwe is already working with ICTs in providing information on HIV/AIDS and the same can be done for other developing countries in other regions other than Southern Africa. From SAFAIDS, Zimbabwe it is evident that librarians can work closely with journalists and can effectively disseminate HIV/AIDS information to the majority of people in developing countries and this will indeed help developing countries to have informed societies and help the fight against HIV/AIDS.

Challenges
There are however challenges to the provision of HIV/AIDS information by librarians in developing countries. The challenges include the following:
- Low levels of penetration of the infrastructure and supporting environment necessary to effectively use ICTs in developing countries
- High cost of Internet connectivity and services
- High cost of computer hardware is a major issue as this is often the largest component of the budget
- Inadequate funding of libraries by their governments might make it difficult for libraries in developing countries to effectively harness ICTs in the provision of HIV/AIDS information.
- Libraries continue to face the challenge of diminishing budgets
- Lack of ICT proper training in libraries
- Television coverage is largely confined to major towns. Some countries still do not have their own television channel
- Lack of resources

These challenges should not stop librarians in developing countries to harness ICTs in the provision of HIV/AIDS information. Librarians should do with what is available at the moment whilst finding means and ways of improving dissemination of HIV/AIDS information. These efforts may be small but they will play a role before sufficient resources are in place.

Recommendations
Below are some recommendations on how some of these challenges can be met:
- Governments in developing countries should take libraries and provision of HIV/AIDS information seriously, hence government should avail reasonable amounts of money to libraries in order for them to do a good.
- Librarians should have well planned approach to ICT issues to capture funding from either internal and external sources
- Critical to planning any adoption of ICT is ensuring trained staff are available to maintain the network if the connections go down.
- Librarians should develop good strategy to bring ICTs into libraries, get politicians and funders to listen to the needs of libraries
- Librarians should establish cooperation and links with external partners and international organizations for funding of programmes like AfriAfya in Kenya, The Mindset Health Channel in South Africa and countries should aim to have vibrant organizations concerned with HIV/AIDS like SAFAIDS, Zimbabwe.

From the above discussion, it is important that librarians in developing countries capitalize on the potential offered by information and communication technologies to be more effective in the struggle against HIV/AIDS. It is also likely to be many years until ARVs are widely available in developing countries. Therefore, it is important that everything that can be done and should be done to provide information to support people living with HIV/AIDS. Of importance is to have this information collected, repackaged to ensure suitability relevance and disseminated to different target groups. Information and communication technologies can be a powerful tool by librarians in developing countries to share information that will help to prevent the spread of HIV/AIDS and reduce its impact.

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