

## Chapter 12

# ICTS and Their Role in Health Promotion: A Preliminary Situation Analysis in Selected Botswana Rural Communities

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### ABSTRACT

*This chapter presents findings of mini-survey that utilized an exploratory descriptive design to examine the accessibility, affordability, acceptability, and utility of ICTs with specific reference to health promotion for selected rural communities. Specifically, the study focused on access to radio, television, mobile phone, and Internet services at a level of effort and cost that is both acceptable to and within the means of a large majority in a given village. The findings indicate that ICTs gadgets explored have opened up possibility for health services and information to reach even people in the rural areas. Ultimately, access affects the general well-being of individuals. One of the major initiatives under the umbrella of health is improving access to health services and information; and this covers among other things, expanding the delivery of health information through the radio and television. This study confirms breakthrough in this respect. Challenges that accompany the use of these ICT gadgets include no connectivity in some areas and lack of training to use them.*

DOI: 10.4018/978-1-4666-2770-3.ch012

## **INTRODUCTION AND BACKGROUND**

Information Communication Technologies (ICTs) comprises a complex set of goods, services and applications used to produce, distribute, process and transform information. The goods, services and applications may include, among others, telecommunications, television and radio broadcast, Internet, e mail, and computer games (Marcelle, 2000). Current developments in information and communication technology are considered the most important factor affecting the way people live their lives (Emiliani & Stephandis, 2000). ICT affects the way people organize their social activities, keep in contact with others, interact with the environment and entertain themselves. Ultimately, all these aspects affect the general well-being of individuals. In the field of health, ICTs have been described as a means of completing traditional educational techniques to enable health systems to adapt to the different learning needs of societies (Emiliani & Stephanidis).

The government of Botswana considers ICT a powerful driving force to the personal, social, economic and cultural development of the society (Ministry of Communication, Science and Technology (MCST), Botswana, 2007). Like many other countries in Africa and beyond, Botswana is committed to providing universal access to Information and Communications Technology (ICT) for all Botswana. In 2005 therefore, the Botswana National ICT policy was developed to guide, integrate, and coordinate all ICT initiatives. The policy was informed by the local needs assessment and international benchmarks. The major areas addressed by the ICT policy include community access and development, government, learning, health, economic development and growth of the ICT sector, infrastructure, security, legislation, and policy. One of the four major initiatives under the umbrella of health is improving access to health services and information; and this covers among other things, expanding the delivery of health

information through the radio and television (MCST, 2007).

Perhaps more than any other health problems, the HIV and AIDS pandemic evidently indicates that everybody in Botswana is a potential care provider, considering the high prevalence rates of HIV infection in the country. The 2008 Botswana AIDS Impact Survey (BIAS III) registered a prevalence rates of 17.6% and 40% for the general population and the age group 30-44 years, respectively, as well 16% orphanage for persons under 18 years of age (Central Statistics Office, Botswana, 2008). As much as development has had positive impact on the health status of communities in developing countries such as Botswana, it has also brought with it lifestyle diseases such as hypertension, diabetes and mental illnesses in a context where health human resource is frequently a scarce commodity (Godfrey & Julien, 2005).

With the absence of cure for AIDS, and the need for lifestyle change demanded by emerging non-communicable disease, individuals and families have to rely on self, family, and community for coping with the burden of diseases. Health literacy has therefore become a critical coping resource for individuals, families, and communities. The demands of modern life often make a face-to-face contact with a health care professional a costly endeavor. A study on barriers to antiretroviral treatment adherence in Botswana revealed that factors such as the distance to treatment centers, the stigma associated with visiting such centers and job pressure were common barriers (Weiser et al. (2003). In another Botswana study, home-based care was found to be more affordable and cost-effective for persons living with chronic tuberculosis than hospital-based care (Moalosi, Floyd, Phatshwane, Moeti, Binkin, & Kenyon, 2003). Access to effective and population appropriate information and communication technology has the potential to ease the health challenges faced by communities, particularly in rural areas where the shortage of health human resource and

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