Chapter 26
Using Information Technology to Spread Awareness about Communicable Diseases

Twiesha Vachhrajani
University at Buffalo, USA

Lavanya Rao
Rice University, USA

H. R. Rao
University at Buffalo, USA

ABSTRACT

Over time, changes in lifestyles, surroundings, and presence of parasites in the developed and developing world has resulted in new strains of various communicable diseases such as AIDS, tuberculosis, malaria, etc. Even though the global average of diseases may be quite low, the concentration in certain countries is much higher. In developed countries, information technology has proved to be an indispensable tool to spread awareness regarding these communicable diseases; however, most developing countries lack the infrastructure needed to use these same resources to educate people about the prevention, symptoms, and treatment available. This chapter makes the following contributions: first, it outlines some of the critical challenges regarding the spread of communicable diseases. It then identifies and summarizes the various information systems strategies used in developed and developing countries. The conclusion ties these together and offers suggestions to further curb the spread of communicable diseases in developing countries.

INTRODUCTION

Over the past few decades, changes in lifestyles, environments, and presence of parasites in the developed and developing world has resulted in the emergence of various communicable diseases such as AIDS, tuberculosis, malaria, etc. While the global average of the percent of HIV/AIDS infected people is 0.8%, in some developing countries such

as Swaziland and Botswana, approximately 25% of the population is infected (Avert.org).

In developed countries, information technology is becoming increasingly important in communicating messages about the risk of communicable diseases. There exist popular Facebook pages (Greater than AIDS (337,000+ likes), TeachAIDS (52,000+ likes)), Twitter handles (@AIDSgov (241,000+followers)), and AIDS text messaging services (to provide information about HIV testing centers and responses to questions about HIV).

While the use of information technology has proved useful for communicating messages about the risk of communicable diseases in developed countries, the lack of wiring and infrastructure makes such communication difficult in developing countries. Spreading information about prevention, treatment, and available resources is a demanding task, as less than 20% of the people living in these countries have access to television and internet, with 80% of internet usage taking place in a limited number of large cities. Organizations such as SATTELIFE are working to provide low bandwidth internet to rural areas of Africa, but most organizations have cut funding since the start of the global recession.

This paper will make the following two contributions: first, it will outline some of the critical challenges regarding the spread of communicable diseases. It will then identify and summarize the various information systems strategies used in this context in developed and developing countries. The conclusion will tie together these two points and will offer suggestions that may help further curb the spread of communicable diseases in developing countries.

CHALLENGES AGAINST CURBING THE SPREAD OF COMMUNICABLE DISEASES

This section will discuss the various challenges faced in the fight against the spread of communi-

cable diseases. We focus on three main challenges: Campaigns and funding; education and the spread of awareness, and the availability of medications.

Campaigns and Funding

One of the challenges that disease prevention campaigns often face is lack of funding. These campaigns rely predominantly on international donations and trust funds, which are vulnerable to 'donor fatigue' and the global economy. Many donor agencies may target to donate a certain amount, but cannot raise the funds to do so. For example, the Global Fund to Fight AIDS, Tuberculosis, and Malaria pledged $10 billion a year when it first started up, but has since then only delivered $3 billion a year. Most US based charities have decreased their funds by at least 3% since 2007, and most European charities have cut down funding about 7% since 2006 (Padma, 2010). All this funding that is being received is from developed countries, as developing countries themselves have failed to keep up the funding to their AIDS programs. In 2001, 52 African countries pledged to allocate 15% of their national budgets for health, but thus far only 6 are on track. The lack of the money to be invested is leading to watered down campaigns that cannot support their expenditure and do not possess the surplus money they need in order to reach out to communities.

Education and the Spread of Awareness

A very common reason individuals infected with a communicable disease choose not to seek help is because of the stigma associated with the said disease. A comment by a SARS (orH1N1) victim in 2008 states "If unfortunately, I got infected again, I would prefer hiding myself in a secret place and waiting for death rather than going into the hospital. The discrimination against us is really horrifying…I prefer hiding myself rather than going into hospital if I get infected

15 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/using-information-technology-to-spread-awareness-about-communicable-diseases/147873

Related Content

From Ancient Chinese Sages to Modern People Management Principles
Connie Zheng (2015). *Asian Business and Management Practices: Trends and Global Considerations (pp. 27-40).*
www.irma-international.org/chapter/from-ancient-chinese-sages-to-modern-people-management-principles/116573

Career Transitions: From the Boardroom to the Classroom – Do You Know What It Takes? A Teaching Case in Global Leadership
Ivonne Chirino-Klevans (2020). *Cases on Global Leadership in the Contemporary Economy (pp. 7-14).*
www.irma-international.org/chapter/career-transitions/237817

What Determines Tourist Adoption of Hotel Websites for Online Hotel Bookings?: An Empirical Analysis by Taking E-Trust as a Mediator
Suman Lataand Anil Kumar (2021). *International Journal of Asian Business and Information Management (pp. 1-17).*
www.irma-international.org/article/what-determines-tourist-adoption-of-hotel-websites-for-online-hotel-bookings/294101

Emotional Labor in Commercial Hospitality: Motivations and Behavioural Characteristics
H.M. Hanshika Madushani Herathand Sarath Munasinghe (2015). *International Journal of Asian Business and Information Management (pp. 44-60).*
www.irma-international.org/article/emotional-labor-in-commercial-hospitality/135505

An Overview of Executive Information Systems (EIS) Research in South Africa
Udo Richard Averweg (2011). *Global Business: Concepts, Methodologies, Tools and Applications (pp. 1858-1867).*
www.irma-international.org/chapter/overview-executive-information-systems-eis/54875