

Developing a Web Site for Human Immunodeficiency Virus Prevention in a Middle Income Country: A Pilot Study from Thailand

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Abstract

The Internet has often been used to reach men who have sex with men (MSMs) in developed countries. However, its use has not been as widespread in middle income countries because of a perceived lack of access to the web by residents of these countries. However, over half of the Internet users in the world now live in middle income countries. This article describes the development of web-based human immunodeficiency virus (HIV) prevention program that can serve as a model for middle income countries. Thai nursing faculty worked with MSMs to create and evaluate a Web site that provided HIV prevention messages directed toward MSMs. The steps for creating the site are described. Forty-one MSMs used the site and provided feedback to the site developers. The group was young (median = 19 years), low income (median income was ~170 US\$ per month). The users demonstrated that they had access to the Internet and that they could utilize the site. They also reported moderate-to-high levels of satisfaction with site design, content, ease of use, information obtained, and benefits obtained from using the site. A previous article in the Thai language also showed that they reduced risk behaviors. They also made many useful suggestions for improving the content of the site. In conclusion, the study showed that the combination of nurses and MSMs from a middle income country could develop a usable HIV prevention Web site that instructed and changed behavior.

Introduction

THE WORLD HEALTH ORGANIZATION says that the risk of human immunodeficiency virus (HIV) infections among men who have sex with men (MSMs) in Asia was 18.7 times higher than the general population.¹ These high rates are also found in Thailand. A 2007 survey showed that the prevalence of HIV infection among MSMs in Bangkok and Chiang Mai was 30.7 percent and 17 percent, respectively.²

HIV infection is not likely to be limited to MSMs because many MSMs in middle income countries are bisexual.²⁻⁵ Without effective prevention among MSMs, HIV infection will rise among all segments of the population.⁶ However, contacting MSMs in order to do HIV prevention can be difficult because many MSMs do not wish to be identified because of discrimination and violence against HIV infected persons and MSMs. This has been found in Thailand.⁷⁻¹¹ Traditional, written, HIV prevention messages may not reach MSMs because possessing or looking at such materials may reveal their sexual orientation.

Web-based prevention messages allow MSMs to obtain relevant information in an anonymous fashion and have been used in developed countries where Internet access is widely available.¹²⁻¹⁵ Recently, Internet access has greatly expanded with over half of Internet users living in middle income countries in Asia and Latin America.¹⁶ These countries could now use web-based HIV prevention for MSMs. This article reports on the development, implementation, acceptability, and effectiveness of such a program in Thailand.

Methods

This intervention was conducted by five nursing faculties in Chiang Mai, Thailand, in 2010-2011. The subjects were 41 MSMs who were (a) not HIV infected, (b) Chiang Mai province residents, (c) literate in the Thai language, and (d) had Internet literacy and access. At entry to the study, all participants completed questionnaires from the study Web site. Access to the site was restricted to study participants. The

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