



# Communication Strategies at the Provincial Level: Promoting HIV/AIDS Prevention among Youth in School and in the Muslim Community: A Case Study of Satun, Thailand\*

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## Abstract

*Due to Islamic tenets restricting contraception both inside and outside the context of marriage—even for preventing the spread of HIV/AIDS—public health officers, nurses, and NGO workers in Satun province in Thailand have been challenged to extend their coverage of HIV prevention programs to the Muslim community. The objectives of this study were to examine communication strategies to promote HIV/AIDS prevention among youth in school and in the Muslim community, and to identify the factors that facilitate or hinder health service providers in implementing HIV/AIDS prevention programmes. The study was undertaken in October, 2009 in Satun province. Four methods were employed, including documentation, archival records, physical artifact, and in-depth interviews. Six key informants, including nurses, health officers and NGO workers that were engaged, at the time, in implementing STIS/HIV/AIDS*

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*programmes, were interviewed. The results from the case study indicated that the Satun Provincial Public Health Office identified peer leaders among the members of the community and motivated them to participate in the HIV/AIDS prevention programs and to distribute messages about HIV/AIDS and health-related issues because they had similar backgrounds and used non-medical terminology.*

**Keywords:** *Communication Strategies, Health communication, Communication Policy, HIV/AIDs, Muslim*

## กลยุทธ์การสื่อสารระดับจังหวัดเพื่อการป้องกันโรคเอดส์ ในกลุ่มเยาวชนในโรงเรียนและชุมชนมุสลิม: กรณีศึกษาจังหวัดสตูล ประเทศไทย\*

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### บทคัดย่อ

การขยายการดำเนินงานส่งเสริมการป้องกันโรคเอดส์ ไปยังชุมชนชาวมุสลิมที่อาศัยอยู่ในจังหวัดสตูล ถือเป็นสิ่งท้าทายของเจ้าหน้าที่สาธารณสุขจังหวัด พยาบาล และเจ้าหน้าที่องค์กรพัฒนาเอกชนในจังหวัดสตูล เนื่องจากศาสนิกชนที่แต่งงานแล้วหรือยังไม่ได้แต่งงานที่นับถือศาสนาอิสลาม ต้องปฏิบัติตามหลักศาสนาเรื่องการห้ามคุมกำเนิด แม้ว่าจะมีจุดมุ่งหมายเพื่อการป้องกันโรคเอดส์ วัตถุประสงค์ของการศึกษาค้นคว้าครั้งนี้ คือการค้นหากลยุทธ์การสื่อสารเพื่อการส่งเสริมการป้องกันโรคเอดส์ในกลุ่มเยาวชนในชุมชนมุสลิมและจำแนกปัจจัยที่เอื้อหรือขัดขวางการดำเนินงานป้องกันโรคเอดส์ โดยมีการเก็บข้อมูลภาคสนามที่จังหวัดสตูลในช่วงเดือนตุลาคม 2552 งานวิจัยครั้งนี้เป็นแบบการศึกษาเฉพาะกรณี โดยเก็บข้อมูลจาก การศึกษาเชิงเอกสาร การศึกษาจากบันทึกทางประวัติศาสตร์ การศึกษาจากหลักฐานทางกายภาพ และการสัมภาษณ์เชิงลึกจากกลุ่มผู้ให้ข้อมูลสำคัญ ได้แก่ พยาบาล เจ้าหน้าที่สาธารณสุขจังหวัด เจ้าหน้าที่องค์กรพัฒนาเอกชนที่ดำเนินการป้องกันการโรคเอดส์ในขณะนั้น ผลการศึกษาพบว่า กลยุทธ์การสื่อสารที่ผู้ดำเนินการป้องกันโรคเอดส์ในจังหวัดสตูลใช้คือ การมุ่งแสวงหาผู้นำด้านการป้องกันโรคเอดส์ที่เป็นสมาชิกชุมชน ที่มีภูมิหลังที่คล้ายคลึงกับคนในชุมชน และไม่ใช้ศัพท์

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ทางการแพทย์ โดยชักชวนให้ผู้นำเหล่านี้เข้าร่วมโครงการป้องกันโรคเอดส์ และกระตุ้นให้เผยแพร่ข้อมูลข่าวสารเกี่ยวกับโรคเอดส์และโรคที่เกี่ยวข้องแก่สมาชิกในชุมชน

**คำสำคัญ:** กลยุทธ์การสื่อสาร การสื่อสารสุขภาพ นโยบายการสื่อสาร โรคเอดส์ มุสลิม

## Introduction

In Thailand, the main focus of the numerous research projects undertaken in the area of social and behavioural sciences and economics has been upon the knowledge, attitudes, and practices (KAP) pertaining to HIV prevention. Thongcharoen and Thamilikitkul (2005) conducted a meta-analysis and synthesis of 860 HIV/AIDS publications concerning HIV/AIDS research databases in Thailand between 1984 and 2000. Their findings indicated that it is no longer necessary to carry out KAP study, as there is enough information on KAP concerning the different target populations in Thailand. Phiphitkul and Gunpai's study of sex and communication in Thai society, which analyzed 33 studies exploring sex and communication in Thailand from 1977 to 2002, revealed that KAP, a major approach to studies in Thailand, was more concerned with the correlation of attitudes, behaviour, and media exposure than with social and cultural perspectives (Phiphitkul & Gunpai, 2003). However, there are no studies in Thailand that comprehensively examine communication strategies and HIV/AIDS prevention programs from a healthcare provider perspective; nor have any adequately identified the factors that impact HIV-AIDS-related prevention programs. This paper is part of a case study research into HIV/AIDS prevention programs in Thailand. Its purpose is to examine the communication strategies employed to promote HIV/AIDS prevention among youth in school and in the Muslim community in Satun province, and to identify the factors that either facilitate or hinder health service providers' attempts to implement HIV/AIDS prevention programs.

Data from a 2009 behavioural surveillance survey shows that HIV has spread to every province in Thailand (BOE, 2009). Since 1999, decentralization has been enacted (Wibulpolprasert, 2005), and increasing responsibility for managing HIV/AIDS prevention and alleviation has become mandatory at the provincial level. Within this new structure, HIV/AIDS programs are tailored to suit the particular local situation and context (The World Bank, 2002; UNDP, 2004).

## HIV/AIDS and the Health Situation among Youth in School and Muslim Community

Satun is located in the far south of Thailand (Satun Governor's Office, 2009). The majority of the Satun people are Muslim (74.10%), followed by Buddhist (25.81%) and Christian and others (0.09%). As regards the HIV/AIDS situation and HIV risk behaviour in this province, the Bureau of Epidemiology (BOE) states that the number of reported cases of AIDS from 1984 to 2010 was only 886 (BOE, 2010a, 2010b). The largest number of HIV infections occurred among the working-age population (25 to 34 years old) and accounted for 45.32% of all symptomatic cases diagnosed in 2010. This situation clearly showed that this working population has been infected by HIV/AIDs since they were at the adolescent age. The Satun HIV/AIDS alleviation plan prioritised young people as vulnerable to HIV/AIDS transmission. **Youth are identified as a major target population because of** their low levels of HIV/AIDS knowledge and high-risk sexual behaviour. Moreover, Islamic tenets restrict the use of condoms and contraception both inside and outside the context of marriage—even for preventing the spread of HIV/AIDS. This province, which is already implementing HIV/AIDS prevention programs among youth in school and in the community, challenges public health officers, nurses, and NGO workers to extend their coverage of health services—particularly HIV prevention programs—to the Muslim community.

This paper provides valuable insights into the current prevention practices among youth in school and the Muslim community. The outcomes of this study will delineate the contribution and hindrance factors involved when implementing HIV/AIDS prevention programs. As a consequence, this paper will be relevant for policy makers and practitioners both in Thailand and internationally that aim to provide culturally-sensitive and appropriate services to young adolescents.

### Theoretical Framework

The Diffusion of Innovations theory (DOI) (Rogers, 2003) and the Communication Framework for HIV/AIDS developed by the UNAIDS/PENNSTATE Project in 1999 offer an overlapping framework that assists in the comprehensive investigation of

communication strategies to promote HIV/AIDS prevention in Satun.

Although elements of the DOI theory have been utilised by numerous HIV/AIDS programs throughout the world, it has been criticised for not demonstrating clear guidelines regarding the social, cultural, and economic factors that hinder the spread of HIV. Poverty, poor infrastructure, and gender power imbalance combine to fuel the spread of HIV (Bertrand, 2004). The Communication Framework for HIV/AIDS (a UNAIDS/Pennstate project, 1999) suggests combining elements of DOI with the framework to operate HIV/AIDS prevention programs. This paper utilises the major elements of DOI and the five domain contexts of Communication Frameworks for HIV/AIDS to examine HIV/AIDS prevention programs among the youth in school and in the Muslim Community in Satun province. It seeks to answer the following questions: What communication channels are used to disseminate the HIV/AIDS prevention message? What are the factors that either facilitate or hinder HIV/AIDS prevention programs? An attempt will be made to explain these two theoretical frameworks and their main concepts in the following.

### **Diffusion of Innovations Theory (DOI)**

Rogers (2003) defines diffusion as: "...the process by which an *innovation* is *communicated* through certain *channels* over *time* among the members of *social system* (p.10)." DOI is categorised as a social model (Bertrand, 2004), which provides guidance regarding development programs that involve peoples of whole communities rather than individuals. The three main concepts of DOI in this paper are as follows: communication channels, homophily, and opinion leaders.

**Communication channels** are the means by which messages are conveyed from one individual to another (Rogers, 1983). Rogers and Svenning (1969) state that messages dealing with innovation are distributed by mass media and interpersonal channels. Mass media, radio, and television and newspapers are the most effective channels for disseminating information concerning innovation and for increasing knowledge (Rogers, 1995). Interpersonal channels, however, are more effective for motivating people to accept innovation (Rogers, 1995; United Nations Population

Fund & The Rockefeller Foundation, 2001). With reference to AIDS prevention efforts, Svenkerud and Singhal (1998) state that: “Interpersonal channels [are] viewed as being especially appropriate to change behavior given the “sensitive” nature of most HIV/AIDS topics (p. 205).”

The term *homophily* refers to people that are similar to each other, live and work together, and share similar interests. More effective communication will result if there is communication between two or more people that share the same types of backgrounds, for example, socioeconomic status, levels of education, and social status and beliefs (Rogers, 1983). Rogers et al. (2005) suggest that the more homophilous the senders and receivers, the less the strain experienced when delivering the message. This concept is crucial for HIV prevention campaigns: it facilitates the increase of effective communication, particularly homophily among staff and the target population. Svenkerud, Singhal, and Papa (1998) found from their investigation of 55 HIV/AIDS prevention programs in Thailand that high-risk populations have a deeply-rooted fear of stigma. Prevention programs should thus consider recruiting outreach workers of similar social status to the target population.

*Opinion leaders* are those that are likely to exercise a strong influence over others' attitudes and practices. They are in general cosmopolitan, people that have frequent exposure to a wider spectrum of communications than others, enjoy high social status, and are innovative (Rogers, 1983). As regards social work intervention, Dearing (2009) concludes that opinion leaders can be identified among targeted populations and selected to help in the implementation of intervention. Information about innovation is provided to opinion leaders, who in turn are encouraged to discuss the topic with the community in general, in particular advising them where to seek the appropriate knowledge.

## The Communication Framework for HIV/AIDS

The Communication Framework for HIV/AIDS was formulated in 1999 by a Joint United Nations Programme on HIV/AIDS (UNAIDS) and Pennsylvania State University (Okigbo, Okigbo, Hall, & Ziegler, 2002). While the framework (a UNAIDS/Pennstate project, 1999) highlights several theories employed in HIV/AIDS prevention such as the Health Belief Model, the Theory of Reasoned Action,



Social Learning and Cognitive Theories, the AIDS Risk Reduction Model and Diffusion of Innovations theories only focus on the individual. Attempts to change individual behaviour alone are not enough if the specific social factors that determine an individual's behaviour continue to be neglected. Airhihenbuwa and Obregon (2000) argue that although these theories may have proven successful in some western societies, they have limited applicability when applied to the Asian, African, Latin American and Caribbean cultures, where family and community play the leading role in influencing health and well-being. Ford, Odallo, and Chorlton (2003) contend that the HIV/AIDS communication framework involves all of the people in the community and connects external change agents, such as government organisations and development agencies, to the community.

Five domains, including government/policy, socioeconomic status (SES), culture, gender relations and spirituality, were identified as crucial factors in the social environment that have an impact on HIV/AIDS prevention and alleviation efforts (Airhihenbuwa, Makinwa, & Obregon, 2000).

### **Government/policy**

Government policy and law, which are vital components of HIV/AIDS prevention and care programs, may either facilitate or impede the implementation of HIV/AIDS communication (a UNAIDS/Pennstate project, 1999; Airhihenbuwa, 1995). The framework (a UNAIDS/Pennstate project, 1999) identifies the crucial topics that should be considered when utilising the framework:

*Collaboration:* Examining the role of government in supporting coordination between regions (ibid.). The active participation of other stakeholders and advocacy groups is crucial for setting up agenda to formulate national policy (Singhal & Rogers, 2003).

*Policy:* It is important to consider the extent to which policy makers at the national, regional, and local levels facilitate or impede the success of the behavioural and social change programs (Ababa, 2002).

### **Socioeconomic Status (SES)**

There is a particular relationship between SES and HIV/AIDS prevalence. People of low socio-economic status are more vulnerable to HIV/AIDS disease (a UNAIDS/Pennstate project, 1999; Ababa, 2002; Singhal, 2001). The framework (a UNAIDS/Pennstate project, 1999) indicates that the SES domain is a key element in successful response to HIV/AIDS communication programs. The Communication Framework for HIV/AIDS suggests addressing socio-economic problems when implementing HIV/AIDS communication programs.

*Social and Development Problems:* Planning priorities to provide financial support and resources for development needs should include HIV/AIDS alleviation efforts as one of the social and development problems (a UNAIDS/Pennstate project, 1999).

*Affordability:* One important indicator of SES is affordability. Many governments and a large number of people cannot afford the cost of combination drug therapy (Airhihenbuwa, 1995). Previous studies have found that the cost of treatment and transportation can be a major hindrance to youth accessibility to STIs clinics in Australia (Poljski, Atkin, & Williams, 2003) and the USA (Tilson et al., 2004).

*Accessibility:* It is essential to examine all of the problems that impact accessibility to health services. The extant literature has reveals that constraints of time can reduce the possibility of accessing STIs services (Benjarattanaporn P et al., 1997; Esler, Ooi, & Merritt, 2008; Tilson et al., 2004). For example, Jayabashkar's quantitative study undertaken among male clients attending an STI clinic in Singapore detected three major reasons for delay in receiving treatment from the clinic: lack of knowledge of STD symptoms, lack of knowledge of sexual health services, and the inability to access service during office hours (Jayabashkar, 2003).

### **Culture**

UNAIDS & Pennsylvania State University (1999) define culture as "the collective consciousness of a people. It is shaped by a sense of shared history, language, and psychology. There is no right or wrong culture, despite differences

in communication codes and meanings. Certain elements of culture tend to remain over time while others change (p. 38).”

When implementing an HIV/AIDS prevention and care program, it is crucial to determine any positive and negative aspects of a given culture that may promote or hinder HIV/AIDS programs (a UNAIDS/Pennstate project, 1999; Singhal, 2003). The framework (a UNAIDS/Pennstate project, 1999) suggests certain key points regarding the cultural factors that should be taken into account when planning such programs.

*The use of language:* An understanding of the styles and use of language in different cultures is imperative when designing communication strategies (a UNAIDS/Pennstate project, 1999). Andriote (2000) notes that Cambodian fishermen in Ranong, Thailand have difficulty buying condoms because they cannot communicate in the Thai language. The International Women’s Rights Action Watch Asia Pacific report (2009) reveals that the language barrier impedes Lao migrant women’s access to healthcare services in Thailand. Adeyanju (2008), in his review of communication patterns, cultural competence, and the language barriers affecting minorities that receive healthcare services in the USA, emphasises the importance of language issues and quality of healthcare services. Healthcare providers must take into account the literacy levels of the target population and ensure cross-cultural understanding. Interpreters (and translators) are essential to the successful delivery of healthcare services to clients from multicultural backgrounds.

*Relationships within the family and community:* These should be investigated as factors that influence decision making regarding accepting preventive health practices and treatments (a UNAIDS/Pennstate project, 1999). Societies in which the family and community are more important than the individual are referred to as collectivist, one of the characteristics of the dimensions of cultures formulated by Hofstede. In a collectivist culture, “we identity” takes priority over “I identity” (p. 367) (Ting-Toomey, 2006). Thai people are known to value a collectivist culture (Hofstede, 2000).

### Gender

The Communication Framework for HIV/AIDS (a UNAIDS/Pennstate project, 1999) defines gender roles as follows: they “influence the ways that men and women are vulnerable to HIV transmission and mediate the impact of living with HIV/AIDS (p.40).” This is crucial to the tailoring of communication programs to suit the needs of men and women. The major focus of implementing programs should be upon the impact of the roles and responsibilities of men and women and socio-cultural factors on the relationships that obtain between them. Recognition of gender roles and the interrelationship of power and negotiation between men and women is essential (Airhihenbuwa et al., 2000).

### Spirituality

The Communication Framework for HIV/AIDS (a UNAIDS/Pennstate project, 1999) notes that spiritual/religious values can play a role in promoting or hindering the translation of prevention messages into positive health behaviour. Several studies have noted the relations between spirituality and positive health behavior. In the HIV/AIDS context, investigators found that the spiritual doctrines regarding sex outside of marriage and condom use, which have been problematic for HIV/AIDS prevention programs, are mostly peculiar to Christianity and Islam. Regarding the Muslim principle, sexual intercourse within marriage is encouraged but sexual engagement outside of marriage is forbidden and must be avoided (Gerholm, 2003; Maulana, Krumeich, & Van Den Borne, 2009; Smerecnik, Schaalma, Gerjo, Meijer, & Poelman, 2010). Discussion of sex issues is also prohibited because it is strictly perceived as a private matter (Hasnain, 2005).

### Methodology

This research was conducted in five provinces spread across four regions (north, northeast, south, and central) of Thailand between 1 October 2009 and 3 February 2010. The findings presented here mainly focus on the results from Satun province. In an attempt to provide a naturalistic and comprehensive examination, a qualitative case study method was employed for the purposes of this study (Willis, Jost, & Nilakanta, 2007). Four methods were utilised to obtain data: these

included in-depth interviews, documentation, archival records and physical artifacts. Using different sources of evidence strengthens the case study method: a data triangulation method, for example, provides a variety of measures of the same circumstances and increases construct validity (Yin, 2009).

## Data Collection Procedure

(1). *Gaining approval from the province*: An invitation letter was sent to the Chief of Satun Provincial Public Health Office on 17 August 2009. The public health officer, who was in charge of the HIV/AIDS program, was assigned as a contact person, whose task was to invite nurses and NGO workers to be informants in this study.

(2). *Collecting documents*: During the first visit to the setting, documents were obtained pertaining to policy materials, sentinel surveillance reports, and HIV/AIDS prevention project reports.

(3). *Identifying informants*: The coordinating person identified and contacted nurses, public health officers and NGO workers already engaged in STIs/HIV/AIDS prevention programs among youth.

(4). *Conducting in-depth interviews*: Six informants, including nurses, public health officers, and NGO workers, were interviewed. Forty-five minute in-depth interviews were conducted at the workplace of each informant. During the fieldwork, the locations and appearance/condition of healthcare facilities were noted. The HIV/AIDS prevention materials were collected. Permission to collect these materials was also sought after every interview session.

**Table 1 Key Informant Characteristics**

	Level	Clients	Sector	Gender
KhunMoh Jongrak	Executive level	Youth	Government	Male
Surang	Official	Youth	Government	Female
Wassana	Official	Youth	Government	Female
Parichart	Official	Youth	Government	Female
Daranee	Nurse	Youth	Community Hospital	Female
Siriporn	NGO Worker	Youth	NGO	Female

An interview guide was developed based on DOI theory and the Communication Framework for HIV/AIDS. Interview questions were mostly open-ended. The interview guide requested the following information: (1) how do implementing agencies in this province reach youth via HIV/AIDS prevention programs and (2) what are the factors that hinder or facilitate HIV/AIDS prevention programs? Thematic content analysis (Green & Thorogood, 2004) was employed to analyse the data. In order to increase the validity of interpretation, simple frequency counts were provided to demonstrate the prevalence of particular kinds of views.

## Results:

### Interpersonal Channels Versus Mass Communication Channels

Data from document sources and in-depth interviews suggested that the two types of communication channels used to distribute HIV/AIDS messages and reach people in the community are (1) interpersonal channels (e.g., peer leaders) and (2) mass communication channels (e.g., radio).

#### (1) Interpersonal Channels

Four of the six key informants stressed the importance of developing peer leaders as communication channels for the distribution of HIV/AIDS prevention programs. They take advantage of homophilous communication by identifying peer leaders among members of the community. These peer leaders have similar backgrounds (e.g., language, social status, and education) to others residing in the community; therefore, they can communicate more effectively with each other. Nurses regularly attend the “Nu Rhi”<sup>1</sup> ceremonies and other activities in the community to establish rapport with housewives and to identify the peer leaders among them. Peer leaders are regarded as effective channels because they use simple language and non-medical terminology, and they are able to initiate their own HIV/AIDS programs in the community. Nurses play a role in supervising and supporting these

<sup>1</sup> With reference to the “Nu Rhi” ceremony, Muslims in Satun refer to Nu Rhi ceremonies as small receptions on various occasions such as Nu Rhi house-warming receptions and Nu Rhi funeral receptions. Hosts of Nu Rhi usually provide food and drink to all the guests that attend the ceremony.

leaders' attempts to implement HIV/AIDS programs. Two Provincial Public Health Officers (PHO) recounted successful stories of peer leaders in this district:

Peer leaders in one district can initiate their own program. They establish community centres by themselves. Nurses gave peer leaders advice and support them (Surang).

We found that a nurse in one district successfully created a sustainable and strong HIV/AIDS program. Peer leaders can initiate their own programs and establish community centres. Nurses provide some advices for peer leaders. They have already been dealing with various problems such as drugs and HIV/AIDS (Wassana).

The Satun Public Health Office places emphasis on developing the peer leaders in each district. As the latter are members of their respective communities, they have more understanding of the actual situation than PHOs. Peer leaders have effectively initiated and implemented their own HIV/AIDS programs. As peer leaders live in the community, they are able to create long-lasting HIV/AIDS programs that do not depend on outside financial aid. As Khun Surang, a PHO, observed:

The District Based Program for HIV/AIDS Prevention, Care and Support is focused on developing peer leaders in all districts. We collaborate with the District Health Office to organise Peer Leader HIV/AIDS programs. Peer leaders have knowledge about HIV/AIDS prevention. Some of them intend to carry out the program in their own communities. I think even if we no longer provide financial support for them, they will still have peer leader networks to continue to implement HIV/AIDS programs in their own districts (Surang).

## **(2) Mass Communication Channels (radio)**

Implementing agencies in Satun distribute HIV/AIDS prevention messages to youth and the community in general via radio programs and community radio. According to the document source, Satun's report on the implementation of HIV/AIDS prevention and alleviation indicated that during the financial year 2008, the National Broadcasting of Thailand distributed knowledge about HIV/AIDS 70 times

(Satun PHO, 2008a). Consistent with the documentation, key informants reported using the radio for distributing HIV/AIDS prevention information in this province. Learning from past experience that people in general do not read leaflets, community radio has been used to distribute both the HIV/AIDS message and health information. HIV/AIDS preventive messages were regularly disseminated via radio during the period in which the Satun PHO had a substantial budget allocation for HIV/AIDS programs. Today, the Satun PHO has scant if any financial resources for such programs. The budget allocation for promoting HIV/AIDS prevention via radio has been terminated. The National Broadcasting of Thailand helps the Satun PHO to distribute the HIV/AIDS information twice monthly. As the PHO noted:

In the past, we had a lot of budget so we bought air time from the radio station. Information was frequently aired at that time. Currently, we don't have a budget. The National Broadcasting of Thailand helps us disseminate HIV/AIDS information, usually twice a month (Parichart)

## **Factors that Adversely Affect the Implementation of HIV/AIDS Prevention Programs Facilitating Factors**

Collaboration and financial support are viewed as the major factors facilitating the implementation of HIV/AIDS programs in this province.

### **(1) Collaboration between Satun PHO and Civil Society**

Satun province has focused upon the collaboration between all sectors in implementing HIV/AIDS programs. It has been noted in Strategy 4 of the Satun Strategic Plan for HIV/AIDS Prevention and Alleviation 2009-2011 that the efficacy of the implementing agencies is enhanced by coordination and collaboration between agencies and networks (Satun PHO, 2008b). The Satun PHO acknowledges the importance of, and promotes collaboration between, all sectors for more effective HIV/AIDS program management. Collaborative practices yield strong synergy and empower the implementation of HIV/AIDS programs which, rather than remaining at the planning level, are translated into practice by the province's core implementing agencies. Consistent with the documentation, key informants



demonstrated the benefits that can accrue from collaboration between sectors. Collaboration between agencies in the civil sector enhances the former's ability to mobilise financial resources for HIV/AIDS programs in this province. As one executive PHO, Khun Moh Jongrak, observed:

Many civil society networks in several districts have a high capacity to implement continuous programs and yield good outcomes. They help each other to search for financial support, and have implemented numerous activities in our province (Jongrak).

## **(2) Financial Support**

Almost all of the key informants emphasised the importance of financial support in the implementation of the HIV/AIDS prevention programs in this province. Sufficient financial resources allow the civil sector to launch various HIV/AIDS prevention activities in community centres. Due to receiving financial support from outside donors, the Satun PHO was able to significantly increase its HIV/AIDS prevention activities among the region's youth. One local PHO said:

Ten years ago we received nearly 10 million baht (USD\$ 322,265) every year. We conducted a lot of activities. After 2005, we had no budget because the government cut the budget for HIV/AIDS programs. We are so lucky that UNICEF granted us a budget for a program related to youth in 2007. We were able to organise training activities for LAO staff. We provided information about HIV/AIDS and persuaded them to carry out HIV/AIDS programs in their own districts (Parichart).

## **Hindrance Factors**

The results from the documentation and in-depth interviews indicated that the policies, along with and Islamic principles, hinder the implementation of HIV/AIDS prevention programs in this province.

### **(1) Policy**

Four of the six key informants believed that policy **hindered the implementation of HIV/AIDS prevention programs in this province.**

HIV/AIDS programs are not integrated into provincial development policy: public health policy gives priority to the prevention effort and to reducing the spread of emerging diseases such as Influenza, Haemorrhagic Fever, Swine Flu and Tuberculosis. Only a small budget has been allocated to HIV/AIDS prevention programs. PHOs are required to carry out prevention programs for other diseases; as a consequence, the capacity of PHOs to conduct continuous HIV/AIDS programs is restricted, and they face increasing difficulty when attempting to implement HIV/AIDS programs at the district level.

During the data collection period, the author travelled around the Muang Satun district to observe how the media have been used to distribute HIV/AIDS prevention messages in this province. Outdoor advertising on the Swine Flu in front of the Satun PHO and one sticker detailing condom use in the hotel (Figure 2) were found.



**Figure 2: Photos of HIV/AIDS Prevention Stickers and Outdoor Billboards Advertising Swine Flu**

On the left is a sticker about HIV/AIDS prevention in the mirror of a bathroom in a hotel room. The messages from top to bottom are: “following driving regulations can reduce accidents,” “love yourself, fear AIDS, don’t refuse condoms,” and “with love and concern from the HIV/AIDS Cluster.”

On the right are outdoor billboards advertising swine flu prevention, set up in front of the Satun Provincial Public Health Office. The messages from left to right are “eat hot food,” “use a serving spoon,” “wash hands,” and “wear a mask.”

The above examples of photos taken in Satun province reveal that AIDS is not considered an emerging disease. The photo on the left is an HIV/AIDS prevention sticker that was attached to the mirror in the author’s hotel bathroom. The sticker depicts two happy condom cartoon characters standing together holding each other. However, the sticker seemed old as if it had been placed in this room a long time ago. It seems that stickers were restricted to hotel rooms because although HIV/AIDS is considered a disease related to sexual activity, the fact that it involves small groups minimised the need for widespread public attention.

In comparison, the photo on the right shows outdoor billboards advertising Swine flu prevention. This billboard was set up in front of the Public Health Office which is located near the provincial public hospital and community areas in the centre of Satun city. The billboard, which is big, striking, and bold in colour, and designed to catch everyone’s eyes, depicts a happy young lady cartoon character demonstrating how to prevent Swine Flu infection. These two photos suggest that interest in HIV/AIDS prevention campaigns is low. The important campaign of this province is Swine flu prevention (the onset of Swine Flu, an emerging disease, occurred during the author’s visit). Therefore, focus is upon Swine Flu rather than on HIV/AIDS.

## **(2) Restrictive Islamic Principles**

The results of the document research and in-depth interviews show that Islamic principles may have hindered the implementation of HIV/AIDS prevention activities among teenagers and people in the community. A book entitled *Culture Development of History Symbol and Intellect: Satun Province* (Archive and Document

Committee, 1999) states that there are several prohibitive Islamic tenets. Breaking the rules is sinful and sinners will be punished by Allah. One prohibition which relates to HIV/AIDS prevention is: "Contraception or birth control in a healthy mother is prohibited, except where necessary to preserve the life or health of the mother."

As may be seen from the above statement, contraception or birth control is not accepted: it is only permitted when a mother is at risk. Four of the six key informants reported that HIV/AIDS prevention programs among teenagers and people in the community were hampered by this particular religious prohibition. Islamic tenets, which limit the use of condoms and forbid any talk of condoms, have a negative impact on HIV/AIDS programs. Due to the fact that programs are not acceptable in some districts, implementing agencies are not able to implement activities related to condom use or safe sex practice and cannot comprehensively carry out programs in the province. As premarital sex and condom use are forbidden in the Muslim community, the head of the community centre is unable to discuss condom use directly with the youth in schools or the people in the community:

We cannot directly recommend teenagers to use condoms when we organise activities in schools. We try to guide them to use condoms: we only tell them that our community centre provides condoms (Siriporn).

Due to the rigid, religious prohibitions regarding contraception and premarital sex, the installation of condom vending machines has been vetoed by people in the community. Some people use the Thai proverb, "pointing the hole in the tree to the squirrel" meaning showing the way to weakness, as a criticism of installing condom vending machines in the community. From the Muslims' perspective, installing condom vending machines in the community arouses sexual interest and leads to premarital sexual intercourse among youth. As one PHO said:

Muslims refused to install condom vending machines in their community because they don't have knowledge about HIV/AIDS. According to their religious principle, installing condom vending machines or talking about condom use can arouse sexual interest among Muslim teenagers. Muslims say that they have knowledge of HIV/AIDS but the use of condoms goes against their religious

principles. Some complain that we are “pointing the tree hole to the squirrel.” Nowadays, [while] we are allowed to talk about condom use in a few districts, the topic is still unacceptable in others. I myself lack knowledge about Islamic principles. They say that they will not mention any issues that can provoke teenagers to have sex before marriage. I think they forget that sex is a natural thing and we cannot force teenagers to delay their sexual intercourse. They ignore the fact that they cannot watch over their children all the time (Wassana).

## Discussion

The DOI and HIV/AIDS communication initiative provides a framework in which to examine and explain HIV/AIDS prevention programs within the Thai context. The findings suggest that this province’s administration uses interpersonal communication channels (e.g., peer leaders and religious leaders) as major tools for transmitting HIV/AIDS prevention messages to youth and people in the community. The relative degree of similarity or homophily of the individuals, who constitute a somewhat unique population, facilitates effective communication (Rogers, 1995). Public health officers, nurses and NGO workers in Satun province recognise this benefit. As change agents, they are markedly heterophilous (different) from youth vis-a-vis certain attributes such as beliefs, education and religious, and they place emphasis on developing peer leaders selected from among the school and communities. It is easier to discuss sexual issues with friends. Similar results were reported by Brack, Millard & Shah (2008) and Wyatt & Oswalt (2011), who found that peer leaders in schools proved to be powerful agents for distributing HIV/AIDS prevention material in schools because peer leaders were similar to their friends in terms of culture, experience, interests, personalities, values, and age. The present findings, it is suggested, yield broader results than previous studies. They show that as peer leaders belong to their own respective groups, speak the same language, and use non-medical terminology, they help to enhance the capacity of outreach programs to reach target populations. Generally, people prefer to discuss sensitive topics such as sexuality with friends, as they are seen as trusted sources and have similar characteristics, statuses, and interests. These similarities can facilitate

more effective communication regarding HIV/AIDS prevention issues.

Moreover, developing peer leaders in schools and communities gives a voice to members in the community and helps to foster feelings of ownership of HIV/AIDS programs. As peer leaders live in the community, they understand the everyday reality and are able to initiate and implement their own long-lasting HIV/AIDS programs rather than short-term programs that rely on outside assistance. Peer leaders in Satun have the capacity to request financial support from the Satun PHO and other financial sources and to establish community centres to promote HIV/AIDS prevention in their own communities. This is consistent with previous studies (Norton & Mutonyi, 2007; Pattman & Cockerill, 2007; Wyatt & Oswalt, 2011). Peer educators in South Africa, for example, recognise and respond to the actual needs of young people (Pattman & Cockerill, 2007). HIV/AIDS clubs in schools in eastern Uganda and Thailand are governed by students, who play a role in educating young people in school as well as in the community (Norton & Mutonyi, 2007; Poonsri, Sittiboon, & Pewmali, 2005). Peer leaders are familiar with and have insightful understanding of the situations and problems that obtain in their own communities. They are also members of the community. Therefore, they are able to work closely with fellow members to initiate and implement their own programs. This will reinforce feelings that the problems and programs are theirs and that they should commit to the program. In this way, they become voices for change in their own communities.

Collaboration among the government and NGO sectors is an important factor for implementing HIV/AIDS prevention programs in Satun province. The present findings show that collaboration maximises efficiency of resource allocation. The results of this research, which are consistent with the studies of the Federal Interagency HIV/AIDS Case Management Work Group (2006) and Wandwalo et al. (2004), identified the benefits that collaborations offer HIV/AIDS programs. For those engaged in the fight against the epidemics, financial resources are crucial (Barnett & Whiteside, 2006). Issues such as budget allocation, financial resources, and sources of budget are not clearly defined as the key components of government policy concerning the Communication Framework for HIV/AIDS. The findings of this study show that ample financial support, from both international and local sources, leads to the continuity of programs. The major part of the budget for HIV/AIDS prevention

programs among youth in Satun has been allocated by international donors, and as a consequence, Satun PHO has been able to significantly increase its HIV/AIDS outreach activities among the youth in their province.

Although collaboration and financial support are crucial to HIV/AIDS prevention programs in Satun province, implementation of the HIV/AIDS prevention outreach activities faces several problems, including the low priority of HIV prevention programs and the restrictive religious prohibitions.

The findings suggest that the low priority of HIV/AIDS prevention programs, together with the Islamic religious prohibitions, combine to hinder, reduce, and ultimately eradicate outreach programs among the youth in schools and the community. HIV/AIDS prevention programs have been given low priority and allocated smaller amounts of budget compared to the money spent on prevention efforts to reduce the spread of emerging diseases. This prevents public health officers from conducting continuous HIV/AIDS prevention programs. Similarly, rigid Islamic principles and the lack of knowledge on the part of basic tenets of Islam are among the factors that impose constraints on HIV/AIDS prevention programs. HIV/AIDS prevention programs among the youth and communities in Satun province in the south have been obstructed by Islamic religious prohibitions which limit the use of condoms and forbid direct discussion of condoms and engagement in premarital sexual intercourse. Satun is one of the four provinces of Thailand in which the majority of population are Muslim. However, almost all of the public health officers practice Buddhism and as a result they lack knowledge about Islamic principles. In some districts or communities, HIV/AIDS prevention programs are simply not acceptable: implementing agencies are not able to implement activities related to condom use or safe sex practice and are unable to carry out programs throughout the province. The results confirm what has happened among Muslim youth in other countries. Previous studies have shown that restrictive Islamic tenets preclude youth from receiving safe sex messages and ultimately render them more vulnerable to HIV infection (Maulana et al., 2009). The results of this paper have both policy and program implications for strengthening the efficacy of HIV/AIDS programs. HIV/AIDS prevention programs among youth should be expanded to cover the entire province of Satun. It is crucial to include in training programs the issue of



religious prohibition and HIV/AIDS prevention among community leaders, religious leaders, and teachers to increase their understanding of the HIV/AIDS situation and HIV/AIDS prevention programs in this province. This should be undertaken as a means of re-shaping their attitudes towards condom use and HIV/AIDS prevention practice—from the negative to the positive. It could be of particular importance for Satun PHOs, nurses, and NGO workers to expand their HIV/AIDS outreach activities to all of the districts and communities in their province. The focus of this research has been upon a particular HIV/AIDS prevention program from the perspective of information providers. It is recommended that future research be carried out to investigate the issue from the receivers' perspective.

## References

- a UNAIDS/Pennstate project. (1999). *Communications framework for HIV/AIDS a new direction*. Geneva: Joint United Nations Programme on HIV/AIDS (UNAIDS), Pennsylvania State University.
- Ababa, A. (2002). *HIV/AIDS Communication Framework: HIV/AIDS Prevention and Control Office (HAPCO)*, Pact-Ethiopia and the Joint United Nations Program on HIV/AIDS (UNAIDS).
- Adeyanju, M. (2008). Communication and cultural competence. In M.A. Perez & R.R. Luquis (Eds.), *Cultural competence in health education and health promotion* (pp. 147-161). San Francisco: Jossey-Bass.
- Airhihenbuwa, C.O. (1995). Culture, health education, and critical consciousness. *Journal of Health Education*, 26, 317-319.
- Airhihenbuwa, C.O., Makinwa, B., & Obregon, R. (2000). Toward a new communications framework for HIV/AIDS. *Journal of Health Communication: International Perspectives*, 5(1 supp. 1), 101-111.
- Airhihenbuwa, C.O., & Obregon, R. (2000). A critical assessment of theories/models used in health communication for HIV/AIDS. *Journal of Health Communication*, 5(3), 5-15.
- Andriote, J.-M. (2000). Helping men make a difference in HIV treatment. In K. Henry (Ed.), *Impact on HIV* (Vol. 2 no. 2, pp. 24-29). Virginia: Family Health International.



- Archive and Document Committee. (1999). *Culture development of history symbol and intellect: Satun province* (in Thai). Satun: Committee for Organising His Majesty King Bhumibol Adulyadej's 6th Cycle Birthday Anniversary.
- Auerbach, J., Wypijewska, C., & Brodie, K. (1994). *AIDS and behavior: an integrated approach*. Washington, D.C.: National Academy Press.
- Barnett, T., & Whiteside, A. (2006). *AIDS in the twenty-first century: disease and globalization*. New York: Palgrave Macmillan.
- Benjarattanaporn P., Lindan CP., Mills S., Barclay J., Bennett A., Mugrditchian D., . . . Warnnissorn T. (1997). Men with sexually transmitted diseases in Bangkok: where do they go for treatment and why? *AIDS, 11 Suppl 1*, 87-95.
- Bertrand, J.T. (2004). Diffusion of innovations and HIV/AIDS. *Journal of Health Communication, 9*, 113-121.
- BOE. (2009). *HIV sentinal surveillance phase 27 (June, 2009) by province* (in Thai). In R. Editeditebypui.pdf (Ed.). Nonthaburi: Bureau of Epidemiology (BOE), Ministry of Public Health (MOPH).
- BOE. (2010a). *Table 4.1 the number of AIDS cases by region, zone and provinces in Thailand, September 1984 to July 2010* (in Thai). Nonthaburi: Bureau of Epidemiology (BOE), Ministry of Public Health (MOPH).
- BOE. (2010b). *Table 4.2 the numbers of deaths of persons with AIDS by year of death, region, zone and provinces in Thailand, September 1984 to July 2010* (in Thai). Nonthaburi: Bureau of Epidemiology (BOE), Ministry of Public Health (MOPH).
- Brack, A.B., Millard, M., & Shah, K. (2008). Are peer educators really peers? *Journal of American College Health, 56*, 566-568.
- Dearing, J.W. (2009). Applying diffusion of innovation theory to intervention development. *Research on Social Work Practice, 19*(5), 503-518.
- Esler, D., Ooi, C., & Merritt, T. (2008). Sexual health care for sex workers. *Australian Family Physician, 37* (7), 590-592.
- Ford, N., Odallo, D., & Chorlton, R. (2003). Communication from a human rights perspective: responding to the HIV/AIDS pandemic in Eastern and Southern Africa. *Journal of Health Communication, 8*, 599-612.

- Gerholm, L. (2003). Overcoming temptation: on masculinity and sexuality among Muslims in Stockholm. *Global Networks*, 3(3), 401-416.
- Green, J., & Thorogood, N. (2004). *Qualitative methods for health research*. London: Sage.
- Hasnain, M. (2005). Cultural approach to HIV/AIDS harm reduction in Muslim countries. *Harm Reduction Journal*, 2, 23.
- Hofstede, G. (2000). The cultural relativity of the quality of life concept. In G. R. Weaver (Ed.), *Culture, communication and conflict: readings in intercultural relations* (pp. 138-148). Boston: Pearson.
- International Women's Rights Action Watch Asia Pacific. (2009). *The situation of migrant Lao women in Thailand and their vulnerability to HIV/AIDS for the Committee on the Elimination of Discrimination against Women*. Bangkok: CEDAW.
- Jayabashkar, T. (2003). *Health care seeking behaviour of patients attending an STI clinic in Singapore*. Master of Science, (Master dissertation, National University of Singapore, 2003). Retrieved from [http://www.google.com.au/search?sourceid=navclient&aq=0h&oq=Master+&ie=UTF-8&rlz=1T4SKPB\\_enAU367AU367&q=master+dissertation](http://www.google.com.au/search?sourceid=navclient&aq=0h&oq=Master+&ie=UTF-8&rlz=1T4SKPB_enAU367AU367&q=master+dissertation). Retrieved from [http://scholarbank.nus.edu.sg/bitstream/handle/10635/16479/JayabaskarT\\_HD992912L.pdf?sequence=1](http://scholarbank.nus.edu.sg/bitstream/handle/10635/16479/JayabaskarT_HD992912L.pdf?sequence=1)
- Maulana, A.O., Krumeich, A., & Van Den Borne, B. (2009). Emerging discourse: Islamic teaching in HIV prevention in Kenya. *Journal of Culture, Health & Sexuality*, 11, 559-569.
- Norton, B., & Mutonyi, H. (2007). Talk what others think you can't talk: HIV/AIDS clubs as peer education in Ugandan schools. *Compare: A Journal of Comparative and International Education*, 37(4), 479-492.
- Okigbo, C., Okigbo, C.A., Hall, W.B., Jr., & Ziegler, D. (2002). The HIV/AIDS epidemic in African American communities: lessons from UNAIDS and Africa. *Journal of Black Studies*, 32(6), 615-653.
- Pattman, R., & Cockerill, M. (2007). Christian women and men from Durban: peer sex educators in the making. *International Journal of Inclusive Education*, 11(4), 501-517.

- Phiphitkul, W., & Gunpai, K. (2003). Sex and communication in Thai society (in Thai). Bangkok: Chulalongkorn University.
- Poljski, C., Atkin, L., & Williams, H. (2003). Review of sexual health clinical services in Victoria. Victoria, Australia: Family Planning Victoria.
- Poonsri, N., Sittiboon, T., & Pewmali, R. (2005). *The peer project for HIV/AIDS prevention, sexual problems in school-age students and care for children who have been affected by HIV/AIDS (in Thai)*. Paper presented at the The 10th National HIV/AIDS conference, Bangkok, Thailand.
- Rogers. (1983). *Diffusion of innovations* (3rd ed.). New York: The Free Press.
- Rogers. (1995). *Diffusion of innovations* (4th ed.). New York: The Free Press.
- Rogers. (2003). *Diffusion of innovations* (5th ed.). New York: The Free Press.
- Rogers, E.M., Medina, U.E., Rivera, M.A., & Wiley, C.J. (2005). Complex adaptive systems and the Diffusion of Innovations. *Innovation Journal: Public Sector Innovation Journal*, 10(3), 1-26.
- Rogers, E.M., & Svenning, L. (1969). *Modernization among peasants: the impact of communication*. New York: Hold, Rinehart and Winston.
- Satun Governor's Office. (2009). *Provincial information* (in Thai). Satun: Satun Governor's Office.
- Satun PHO. (2008a). *The implementation of HIV/AIDS prevention and alleviation programs in Satun province, 2008* (in Thai). Satun: Disease Control and HIV/AIDS Cluster, Satun Provincial Public Health Office (PHO).
- Satun PHO. (2008b). *The Satun Strategic Plan for HIV/AIDS Prevention and Alleviation, fiscal year 2009-2011* (in Thai). Satun: Disease control and HIV/AIDS Cluster, Satun Provincial Public Health Office (PHO).
- Singhal, A. (2001). *HIV/AIDS and communication for behavior and social change: programme experiences, examples, and the way forward*. Paper presented at the International Workshop UNAIDS Dept of Policy, Strategy & Research, July 25 to 27, 2000, Geneva.
- Singhal, A. (2003). Focusing on the forest, not just the tree: cultural strategies for combating AIDS. *MICA Communication Review*, 1(1), 21-28.
- Singhal, A., & Rogers, E.M. (2003). *Combating AIDS: communication strategies in action*. New Delhi: Sage.

- Smerecnik, C., Schaalma, H., Gerjo, K., Meijer, S., & Poelman, J. (2010). An exploratory study of Muslim adolescents' views on sexuality: implications for sex education and prevention. *BMC Public Health*, 10(1), 533.
- Svenkerud, P.J., & Singhal, A. (1998). Enhancing the effectiveness of HIV/AIDS prevention programs targeted to unique population groups in Thailand: lessons learned from applying concepts of Diffusion of Innovation and Social Marketing. *Journal of Health Communication*, 3, 193-216.
- Svenkerud, P.J., Singhal, A., & Papa, M.J. (1998). Diffusion of innovations theory and effective targeting of HIV/AIDS programmes in Thailand. *Asian Journal of Communication*, 8(1), 1-30.
- The Federal Interagency HIV/AIDS case management work group. (2006). *Recommendations for case management collaboration and coordination in federally funded HIV/AIDS programs*. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, The Health Resources and Services Administration.
- The World Bank. (2002). *Education and HIV/AIDS: A Window of Hope*. Washington: The International Bank for Reconstruction and Development/The World Bank.
- Thongchareon, P., & Thamlikitkul, V. (2005). A meta-analysis and synthesis of an HIV/AIDS database research in Thailand (in Thai). *Thai AIDS Journal*, 17, 155-174.
- Tilson, E.C., Sanchez, V., Ford, C.L., Smurzynski, M., Leone, P.A., Fox, K.K., Miller, W.C. (2004). Barriers to asymptomatic screening and other STD services for adolescents and young adults: focus group discussions. *BMC Public Health* 2004.
- Ting-Toomey, S. (2006). Managing intercultural conflicts effectively. In L.A. Samovar, R.E. Porter & E.R. McDaniel (Eds.), *Intercultural communication: a reader* (11 ed., pp. 366-377). CA: Thomson Wadsworth.
- UNDP. (2004). *Thailand's response to HIV/AIDS: progress and challenges*. Bangkok: United Nations Development Programme (UNDP).
- United Nations Population Fund, & The Rockefeller Foundation. (2001). *Communication for development roundtable report: focus on HIV/AIDS communication and evaluation*. New York: United Nations Population Fund and The Rockefeller Foundation.

- Wandwalo, E., Kapatata, N., Tarimo, E., Corrigan, C.B., & Morkve, O. (2004). Collaboration between the national tuberculosis programme and a non governmental organization in TB/HIV care at a district level: experience from Tanzania. *African Health Sciences*, 4(2), 109-114.
- Wibulpolprasert, S. (Ed.). (2005). *Thailand health profile 2005-2007*. Nonthaburi: Printing Press, The War Veterans Organization of Thailand.
- Willis, J.W., Jost, N., & Nilakanta, R. (2007). *Foundations of qualitative research; interpretive and critical approaches*. London: Sage.
- Wyatt, T.J., & Oswalt, S.B. (2011). Letting students be innovative! using mini-grants to fund student-designed HIV/AIDS education. *Health Promotion Practice*, 12(3), 414-424.
- Yin, R.K. (2009). *Case study research* (4<sup>th</sup> ed.). Los Angeles: Sage.