

**A STUDY OF ATTITUDES TOWARDS
STIGMATIZATION AND DISCRIMINATION
AGAINST HIV-POSITIVE PATIENTS AND AIDS
PATIENTS RESIDING IN THE NONG PRUE
MUNICIPALITY, NONG PRUE SUB-DISTRICT, BANG
LAMUNG DISTRICT, CHONBURI, THAILAND**

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ABSTRACT

HIV/AIDS discrimination and stigma has continued for many decades, to impede the enjoyment and realization of human rights across the globe. Although the concept of discrimination and stigma has marshaled widely and spread attention in the HIV/AIDS literature in recent years, attitudes towards HIV positive patients and Aids patients has undermined efforts to eradicate this epidemic both in Thailand and globally. Unless discrimination and stigma towards HIV/AIDS patients is conquered, the disease will not be conquered. Owing to the burden imposed by HIV/AIDS among residents living in the Nong Prue municipality, Nong Prue sub-district, Bang Lamung district, Chonburi, Thailand, an exploratory qualitative research study was completed to reveal the attitudes towards HIV/AIDS patients in this Thai province using the accidental sampling method. The main objectives of the research was to examine (1) attitudes towards HIV-positive patients residing in the Nong Prue municipality, Nong Prue sub-district, Bang Lamung district, Chonburi, Thailand, (2) communication messages that aim to reduce stigmatization against HIV-positive patients and AIDS patients in Thailand, and (3) the relationship between the demographic characteristics of the population, attitudes toward HIV-positive patients and AIDS patients, and attitudes toward communication messages that aim to reduce stigmatization against HIV-positive patients and AIDS patients in Thailand.

The study employed quantitative survey research comprising close-ended questionnaires covering questions on attitudes towards HIV positive patients and AIDS patients. Data was collected from a sample of 400 male and female respondents, who were at least 15 years old and reside in the Nong Prue municipality, Nong Prue sub-district, Bang Lamung district, Chonburi.

Almost half of the respondents, who are disgusted and express discrimination towards HIV-positive patients and AIDS patients agree with campaigns that enable the general population, HIV-positive patients, and AIDS patients to coexist in the society. However, respondents who have children suggest that there should be compulsory HIV testing for all job seekers prior to job application. Respondents aged between 31-45 who have received high school or vocational education and those who have children, do not feel disgust towards HIV-positive patients that do not have symptoms. Concerning the attitudes towards communication messages that aim to reduce stigmatization against HIV-positive patients and AIDS patients, the findings reveal that respondents aged 31-45 agree with the supportive communication message stating that, "People who can live together with those who are HIV-positive are respectable." Concurrently, respondents who have received high school or vocational education and respondents who have children agree with the discriminative communication message stating that, "Standardized hospitals should separate treatment and medication areas for HIV-positive patients and AIDS patients from other patients."

There is a significant level of discrimination and stigmatization against HIV positive patients and AIDS patients in the Nong Prue municipality, Nong Prue sub-district, Bang Lamung district, Chonburi, Thailand. Education appears to play a great role in the community with respect to stigmatization and discrimination of HIV/AIDS patients. Although the majority of the community agrees with campaigns that enable HIV-positive patients to coexist with the general population, some groups, especially those who have children and those who have not received college education, still have latent fear that influence them to stay away from HIV-positive patients. Meanwhile, students and middle-aged people see the importance of living together and being open-minded to new knowledge in this matter. The Department of Disease Control together with other relevant sectors should continually educate the society with candid information on HIV/AIDS, to lower discrimination and stigma towards HIV positive and AIDS patients.

Key Terms: HIV, AIDS, stigmatization, discrimination

INTRODUCTION

Acquired Immune Deficiency Syndrome (AIDS) and Human Immunodeficiency Virus (HIV) are one of the greatest public health problems in the Nong Prue district, Thailand. Despite significant efforts on the treatment and prevention of HIV/AIDS, this disease is still an epidemic affecting young people and adults in the region. Discrimination and stigma remain as the most significant problems affecting the success in curbing the spread of HIV/AIDS. Stigma and discrimination usually isolate infected patients from the community, thereby negatively affecting the quality of life [1-3]. Effectively addressing discrimination and stigma towards

HIV/AIDS patients is the major roadblock to concerted efforts, whether at the community, local, national or international level. Eradicating discrimination and stigma related to HIV/AIDS does not only help the nation promote and protect human rights, it also aide in lowering HIV/AIDS transmission. Empirical research exemplify that HIV and AIDS patients' delay from searching healthcare services due to discrimination and stigmatization [1,4]. Comprehending the causes and magnitude of HIV/AIDS-related discrimination and stigma in Nong Prue is necessary for developing anti-stigma programs and strategies.

Discrimination and stigmatization can trigger prejudicial thoughts and actions among communities, governments, colleagues, family members, employers and health care providers. It could cause several health concerns among patients living with HIV/AIDS such as low self-esteem, isolation, and lack of interest in treatment and prevention initiatives for HIV/AIDS [5,6]. Perceived discrimination and stigma has a negative impact on these patients, consequently influencing their harmonious co-existence with society's general population. According to a study by Bharat (2011), nearly a third of the sampled respondents blamed HIV positive patients and AIDS patients for bringing the epidemic into the community [7]. Attitudes towards these patients augment the pervasiveness of HIV/AIDS through impeding the delivery of effective medical and social support for HIV/AIDS patients are not able to interact with the general population. HIV/AIDS patients may also undergo undesirable conditions such as forced resignation, denial of employment, hostility, forced early retirement or segregation in healthcare centers. Exclusion from society and discrimination are the outcomes of stigma that HIV positive and AIDS patients usually experience across the globe. Consequently, these patients prefer not discussing their HIV status and continue engaging in high-risk behavior [8,9]. Issues relating to accessibility, affordability, and availability of treatment and care for HIV positive and AIDS patients have been cited in numerous studies as the poor control of the HIV menace. Preceding studies have discovered that eliminating discrimination and stigma towards these patients will enhance their acceptance in society and treatment of the disease [10].

CAUSE AND IMPORTANCE OF THE ISSUE

In most nations of the world, discrimination and stigma allied to HIV/AIDS has been a major concern for households, health care providers and government. In Thailand, for instance, although the number of HIV-positive patients and AIDS patients has been decreasing, stigma and discrimination against these patients is still prevalent in Thai society, both from the patients themselves and from other people, including residents in the community, senior citizens, family members, public health practitioners, colleagues, and homosexuals [11]. The stigma and discrimination against HIV-positive patients and AIDS patients has created barriers and reduced opportunities for this group, such as failing to live harmoniously in the community, being discriminated against in their occupations, and being forced to undergo an HIV examination prior to job applications [12].

Due to the issues of stigma, discrimination, and new HIV infections, the Bureau of AIDS, TB, and STIs, Department of Disease Control has implemented measures to prevent HIV infections and other sexually transmitted diseases to encourage health sectors, including public sectors,

private sectors, and other relevant sectors to develop quality implementations to attain the goal “Getting to Zero”, which aims to reduce new HIV infections, HIV-related deaths, stigma and discrimination concerning HIV infections. This corresponds to “the National Plan for the Prevention and Alleviation of AIDS 2012-2016” that involves cooperation from sectors including institutions, hospitals, government and private offices to stop violations of rights, stigma, and discrimination against HIV infections, and ultimately reduce the number of HIV-positive patients to zero. Moreover, the government also plans to conduct civic education to create understanding of this matter in the society [11].

The Nong Prue sub-district, Bang Lamung district, Chonburi was one of the areas found having significant stigma and discrimination towards HIV-positive and AIDS patients. For instance, in December 2014, residents from the region living near the Glory Hut Foundation filed a complaint to the Nong Prue municipality suggesting the cancellation of the residence of 48 end-stage AIDS patients claiming that “Having this particular foundation makes community residents feel uncomfortable.” Simultaneously, they feared the possible problems of infections among youths and the effect of tenants terminating their rental services for homes and apartments in the community. Although the mayor of the Nong Prue municipality explained to the community the causes of HIV infections, a majority of the residents still feel uncomfortable. Furthermore, after this incident was aired on the news, it raised widespread controversy, via online media, with supporters and opponents condemning the discriminative behavior of residents in this community [13].

The preceding incident indicates that a large number of the general population still have a negative attitude towards HIV-positive patients and AIDS patients. A majority does not support the idea of HIV-positive patients living harmoniously with society’s general population. This situation might result from the lack of effective AIDS risk communication in society. Public health professionals need to perform a systematic analysis of the target audience to develop a better understanding of their attitudes towards AIDS. Moreover, a systematic survey is also needed to develop effective communication messages that aim to reduce stigma and discrimination towards HIV-positive and AIDS patients. The communication message should be relevant to the residents’ societal and cultural contexts and acceptable to the general population [11,14,15,16].

1. OBJECTIVES

The present study sought to examine:

1. The attitudes toward HIV-positive patients and AIDS patients among residents in the Nong Prue sub-district, Bang Lamung district, Chonburi.
2. The attitudes toward communication messages that aim to reduce stigmatization against HIV-positive patients and AIDS patients in Thailand.
3. The relationship between the demographic characteristics of the population, attitudes toward HIV-positive patients and AIDS patients, and attitudes toward communication messages that aim to reduce stigma against HIV-positive patients and AIDS patients.

2. HYPOTHESIS

There is a positive relationship between the demographic characteristics of the population, attitudes towards HIV-positive patients and AIDS patients, and attitudes towards communication messages that aim to reduce stigma against HIV-positive patients and AIDS patients.

3. SCOPE OF RESEARCH

This research utilized the quantitative research method and leveraged on one-shot descriptive study consisting of close-ended questionnaires to collect data. The sample comprised 400 male and female respondents, who were at least 15 years old, and have been residing in the Nong Prue municipality, Nong Prue sub-district, Bang Lamung district, Chonburi since December 13, 2014. Data collection was performed from May 1 to 8, 2015.

LITERATURE REVIEW

HIV/AIDS discrimination and stigma have a profound impact on people living with the disease and are a major barrier in the integration of HIV-positive patients and AIDS patients in the community. In the current study, information regarding demographics was examined in a number of previous research endeavors regarding attitudes toward stigma and discrimination against HIV-positive patients and AIDS patients. The researchers used variables: gender, age, education, and having children with the following characteristics: Females are more anxious about the effects of HIV infections on the body than males. Besides, females tend to express stigma against HIV-positive patients and AIDS patients more than males [17,18]. Youth living with families that have inaccurate information about HIV infections and AIDS tend to be instilled with negative attitudes towards HIV-positive patients from older family members. This influences the preceding group of youths to engage in stigmatization and discrimination of HIV-positive patients and AIDS patients, similarly to their family members by imitating the behaviors of their parents, teachers, community leaders, and idols. Consequently, if these adults engage in discriminatory behavior against HIV-positive patients, their actions would influence the youth to engage in discriminatory behaviors as well [19,20].

The studies also found that people with low education exemplify disgust towards HIV-positive patients and AIDS patients, such as, walking away or staying away from infected people fearing that unintentional casual contact may cause them to be infected with the disease. Meanwhile, highly educated people show more acceptance against HIV-positive patients because they have accurate knowledge and understanding about the causes of HIV and AIDS infections [21-23]. Furthermore, studies have found that parents and spouses are important in helping HIV-positive patients and AIDS patients reduce stigma against themselves by motivating the patients, thereby enhancing their adaptation to the society and improving their mental health [24]. In contrast, studies also found that a number of parents and relatives in families engage in stigma and discrimination by explicitly showing disgust, such as, through, insulting, offending, or forcing HIV-positive patients and AIDS patients to leave their homes, and forbidding them from having meals with the family [25-28].

These occurrences reveal that the causes of the preceding stigma and discrimination stem from a lack of knowledge along with fear and anxiety of being infected with HIV through talking and touching HIV-positive patients. Consequently, it is essential for the general population to receive accurate information about HIV and AIDS and reduce irrational fear through books, films, brochures, video clips, the Internet, and campaign activities organized and supported by all relevant sectors in society [29,30]. Key persons who should be present in such campaigns include opinion leaders, healthcare experts in HIV/AIDS issues (e.g. medical doctors) community leaders, famous people, and HIV-positive patients that have leadership traits and are accepted by organizations and groups of infected patients [1]. Furthermore, campaigns should apply communication principles such as Edutainment style of communication, integrating knowledge and entertainment that aims to change attitudes and behaviors of the general population in order to reduce irrational fears and misunderstandings about HIV infections [1]. Implementing such strategies would change the perception of the general population from interpreting this matter as irrelevant and disgusting, to perceiving it as relevant and applicable. In addition, it would influence the attitude and behavior of individuals who are disgusted by HIV-positive patients and AIDS patients compelling them to live with them harmoniously in society. Additionally, previous research findings also found that using opinion leaders to communicate information about HIV/AIDS can create more desirable attitudes and sustainable behaviors among the general population than other types of media, in the long-term.

In the past, a study was conducted in Thailand “Analyzing, Reviewing, and Examining Attitudes of HIV-positive patients and AIDS patients in the Nong Prue sub-district, Bang Lamung district, Chonburi” using qualitative research by conducting depth interviews and focus groups in the area of the Nong Prue sub-district, Bang Lamung district, Chonburi. The area was chosen due to the increasing stigmatization and discrimination of HIV-positive patients and AIDS patients by the community residents in December 2014. The research findings indicate that residents in the community, especially (1) those who have children and (2) those who do not have a college education, although a majority indicated having thorough knowledge and understanding about HIV and AIDS infections, they displayed inaccurate understanding and disgust towards HIV-positive patients and AIDS patients. Their discriminating behaviors included refraining from having meals together with family members and close friends who are HIV-positive, fearing being infected with tuberculosis, forbidding their children from studying, swimming, and playing with HIV-positive children, refraining from having meals in restaurants that have HIV-positive staff, and misunderstanding that HIV/AIDS is a mosquito-borne infectious disease.

Moreover, they expressed outrageous disgust and non-acceptance of HIV-positive patients, perceiving them as promiscuous, doomed homosexuals, and perceiving the disease as disgusting to society, not deserving treatment, incurable, and requiring separate treatment from other patients. Furthermore, they felt that blood examinations should be conducted to detect HIV infections prior to job applications. On the other hand, residents in the community revealed that they are willing to take care of HIV-positive family members by themselves. Nevertheless, **(1) public health professionals and stakeholders who are middle-aged and**

have children did not express disgust toward HIV-positive patients and AIDS patients. They were willing to work together and live together with the patients due to their clear knowledge and understanding about the disease. Additionally, they perceived that people who can live harmoniously with HIV-positive patients are admirable and would support HIV-positive patients to participate in activities together with the general population. Moreover (2) students were found interested in gaining knowledge from public health professionals regarding methods of harmonious living with HIV-positive patients and AIDS patients and the correct use of condoms. They also acknowledged the importance of campaigning through different forms of mass media in enhancing harmonious coexistence with HIV-positive patients and AIDS patients, acquiring new knowledge, and providing career opportunities for HIV-positive patients to support themselves similar to the general population [11].

MATERIALS AND METHODS

A qualitative research supplemented by close-ended questionnaires was used to collect data from May 1 to 8, 2015. The sample comprised of 400 male and female residents of the Nong Prue municipality, Nong Prue sub-district, Bang Lamung district, Chonburi, who were at least 15 years old.

1 THE POPULATION AND THE SAMPLE

The population used in this study were residents of the Nong Prue municipality, Nong Prue sub-district, Bang Lamung district, Chonburi, both males and females, comprising of 58,189 people. The sample size was calculated using the formula of Yamane (1973) as the criterion by specifying the confidence level of 95% and the discrepancy at no more than 5%, indicating that the sample size should have at least 397 participants [31]. Hence, the researchers obtained data from a sample of 400 participants in order to prevent loss of participants using this sampling method.

2 INCLUSION CRITERIA

The following inclusion criteria was utilized in completing this research: (1) residents in the community who currently work in professional business careers or management in the community, (2) Residents in the community who have full-time jobs, and (3) public health professionals who are responsible for managing healthcare in governmental sectors or public sectors. All the respondents must have been residents in the Nong Prue municipality from December 13, 2014 until the data collection period (May 1 to 8, 2015). December 13, 2014 was the first day that residents of the community in the Nong Prue sub-district, Bang Lamung district, Chonburi signed a referendum of 131 to 30 votes, to evacuate AIDS patients at the Glory Hut Foundation out of the community [13].

3 SAMPLING METHOD

Multi-stage sampling was used to complete this study with the details of each stage shown as follows:

Stage 1: The population distribution by region found that the population of the Nong Prue municipality, Nong Prue sub-district, Bang Lamung district, Chonburi, consisted of 58,189 people and comprise of 44 administrative regions (Nong Prue municipality, Nong Prue sub-district, Bang Lamung district, Chonburi, 2012)

Stage 2: Simple random sampling - since the 44 administrative region's communities resembled each other (comprised of residents with positive and negative attitudes toward HIV-positive patients and AIDS patients) the researcher used simple random sampling technique to select 20 communities.

Stage 3: Quota sampling - from these 20 communities, the researchers selected 20 participants per community, making a total of 400 participants for the sample.

Stage 4: Accidental sampling - the researchers collected data from densely populated areas using scattered data collection in order to gather data from varied places such as government buildings, schools, and areas where people receives government services, such as police stations, post offices, telephone booths, and utility payment centers.

4 CREATING QUESTIONNAIRE QUESTIONS AND CHECKING VALIDITY

The researchers adapted relevant research concepts from literature reviews to create questions for the questionnaire, evaluating attitudes toward HIV-positive patients and AIDS patients and attitudes toward communication messages concerning HIV-positive patients and AIDS patients. The key communication messages administered to the sampled respondents include; those who stay with people with HIV without discrimination is respectful, an accredited hospital must separate treatment and the drug counter of HIV/AIDS patients from other illnesses, a good public health professional must disseminate information about how to live with people with HIV/AIDS although local communities show no interest in such information, to allow the people with HIV work and live with others in the society which normally make Thai society a pleasant place to live. The respondents were assured that their responses would be kept confidential and strictly used to complete this study. The researchers aim to use these communication messages for content design in a communication intervention to be followed.

The internal validity of questionnaire questions was checked by experts, including the executive of the Bureau of AIDS, TB, and STIs, Department of Disease Control and the Ministry of Public Health. Furthermore, reliability was tested using a pretest sample size of 30 participants to examine whether the sampled respondents understood every single question in the questionnaire. As a result, every question in the questionnaire received the Cronbach's Alpha value greater than 0.8, in which the total sample responses of "disagree" received a mean score of 1 point, while "agree" responses received a mean score of 2 points. Sample responses "uncertain" were excluded in the calculations of mean scores. Consequently, mean scores were found to be between 1.00 and 2.00.

5 STATISTICS USED FOR RESEARCH

Descriptive statistics comprising of frequency distribution, percentages, standard deviation and inferential statistics of Pearson's Chi-square test was used in describing results in this study.

4. RESEARCH FINDINGS, SUMMARY OF RESEARCH FINDINGS, AND RECOMMENDATIONS

RESEARCH FINDINGS

1. DEMOGRAPHICS OF THE SAMPLE

The sample consists of more males than females at 53.75 percent and 46.25 percent, respectively. The majority of the sampled participants were in the age range of 31 to 45 years old, representing 50.50 percent. In addition, the majority of the sampled respondents that have high school or vocational education is 48.25 percent, while those that do not have children stands at 55.9% for males and 44.1% for females. Furthermore, 14 male and 14 female sampled respondents noted that they have acquaintances who are HIV-positive patients or AIDS patients.

Table 1 shows the demographic characteristics of the sample

Demographic characteristics of the sample	Number	Percent
Sex		
Male	215	53.8
Female	185	46.3
Age		
15-30 years old	97	24.3
31-45 years old	202	50.5
46-60 years old	96	24.0
More than 60 years old	5	1.3
Education		
Primary school and below	147	36.8
Vocational School and High-School	193	48.3
Diploma	43	10.8
Bachelor's Degree and above	17	4.3

Demographic characteristics of the sample	Sex		Age				Education			
	Male	Female	15-30 years old	31-45 years old	46-60 years old	More than 60 years old	Primary school and below	Vocational School and High School	Diploma	Bachelor's Degree and above
Children										
No Children	80 (55.9)	63 (44.1)	42 (38.5)	70 (49.0)	14 (9.8)	3 (2.1)	33 (23.1)	85 (44.0)	18 (41.9)	7 (3.9)
With Children	135 (52.5)	122 (4.5)	55 (16.3)	132 (51.4)	78 (30.4)	2 (0.8)	114 (44.1)	108 (56.0)	25 (58.1)	10 (4.9)
Know HIV-infected people										

Family members	9 (60.0)	6 (40.0)	5 (33.3)	4 (26.7)	4 (26.7)	1 (6.7)	5 (33.3)	6 (40.0)	3 (20.0)	1 (6.7)
Neighbors	7 (30.4)	16 (69.6)	10 (43.5)	8 (34.8)	5 (21.7)	0 (0.0)	1 (4.3)	12 (52.2)	10 (43.5)	0 (0.0)
Close friends	6 (50.0)	6 (50.0)	4 (33.3)	6 (50.0)	1 (8.3)	1 (8.3)	2 (16.7)	7 (58.3)	1 (8.3)	2 (16.7)
A friend of children	3 (37.5)	5 (62.5)	2 (25.0)	3 (37.5)	3 (37.5)	0 (0.0)	1 (12.5)	2 (25.0)	2 (25.0)	3 (37.5)
Acquaintances	14 (50.0)	14 (50.0)	10 (35.7)	9 (32.1)	8 (28.6)	1 (3.6)	3 (10.7)	15 (53.6)	7 (25.0)	3 (10.7)
Do not know anyone with HIV	180 (54.9)	148 (45.1)	73 (22.3)	175 (53.4)	75 (22.9)	2 (0.6)	138 (42.1)	156 (47.6)	25 (7.6)	9 (2.7)

2. ATTITUDES OF THE SAMPLE TOWARDS HIV-POSITIVE PATIENTS OR AIDS PATIENTS

The mean score for the number of the sampled respondents who do not feel disgust towards HIV-positive patients showing no symptoms was revealed as ($M = 1.87$). Regarding imposing regulations of compulsory blood examinations for detecting HIV infections, the mean score for the number of respondents feeling that HIV-examinations should not be required before job confirmation was ($M = 1.61$), while that for those requiring HIV examination to be performed before applications for studies was ($M = 1.58$). However, the mean score for the respondents feeling that HIV-examinations should be compulsory prior to job applications was found to be ($M = 1.26$). Concurrently, the mean score for the number of respondents willing to live harmoniously with HIV-positive patients and AIDS patients, especially family members who have AIDS were ($M = 1.91$), while that for those willing to have meals with infected family members were ($M = 1.84$). Additionally, the number of respondents who indicated that they will neither walk away nor stay away from acquaintances that have been infected with HIV was ($M = 1.95$), while the mean score for those who would inform family members if they were infected with HIV was ($M = 1.86$) as shown in Table 2.

Table 2 shows the findings of attitudes toward HIV-positive patients and AIDS patients.

Attitude toward	Feeling Number (Percent)			S.D.	Means/Interpretation
A. People with HIV	Disgust	Not disgust	Not sure		
1. Those with no apparent symptom (HIV)	41 (10.25)	274 (68.50)	85 (21.25)	.348	1.87/ Not disgust
2. Those with apparent symptom (AIDS)	92 (23.00)	202 (50.50)	106 (26.50)	.470	1.69/ Not disgust
B. Force HIV Testing	Agree	Disagree	Not sure	S.D.	Means/Interpretation
1. Before entering school	142 (35.50)	197 (49.25)	61 (25.25)	.499	1.58/ Disagree
2. Before ordain	132	204	64	.489	1.61/

	(33.00)	(51.00)	(16.00)		Disagree
3. Before job application	262 (65.50)	92 (23.00)	46 (11.50)	.448	1.26/ Agree
C. Live with people with HIV/AIDS	Willing	Unwilling	Not sure	S.D.	Means/Interpretation
1. Share a swimming pool with HIV-infected people.	159 (39.75)	71 (17.75)	170 (42.50)	.462	1.69/ Willing
2. Allow the children to be in the same class with HIV-infected children.	192 (48.00)	59 (14.75)	149 (37.25)	.425	1.76/ Willing
3. Allow the children to play with HIV-infected children.	175 (43.75)	63 (15.75)	162 (40.50)	.455	1.74/ Willing
4. Share the house with a family member infected with HIV.	183 (45.75)	43 (10.75)	174 (13.50)	.391	1.81/ Willing
5. Have the meals with a family member infected with HIV.	226 (56.50)	42 (10.50)	132 (33.00)	.365	1.84/ Willing
6. Eat with a close friend who is infected with HIV.	195 (48.75)	38 (9.50)	167 (41.75)	.371	1.83/ Willing
7. Share a toilet with AIDS people.	170 (42.50)	77 (19.25)	153 (38.25)	.465	1.69/ Willing
8. Take care of a family member who have AIDS.	255 (63.75)	26 (6.50)	119 (29.75)	.307	1.91/ Willing
D. Reaction to scenarios	Tell	Do not tell	Not sure	S.D.	Means/Interpretation
1. Are you telling your family member if you found yourself HIV positive?	279 (69.75)	45 (11.25)	76 (19.00)	.346	1.86/ Tell
2. If you encounter an acquaintance and know that he or she is HIV positive, are you walking away?	Walk away	Not walk away	Not sure	S.D.	Means/Interpretation
	16 (4.00)	320 (80.00)	64 (16.00)	.213	1.95/ Do not walk away

Remark: Mean scores and standard deviations have been calculated by excluding participants that gave the response “uncertain” (total mean score 2.00)

3. ATTITUDES OF THE SAMPLE TOWARD COMMUNICATION MESSAGES THAT AIM TO REDUCE STIGMATIZATION AGAINST HIV-POSITIVE PATIENTS AND AIDS PATIENTS

Table 3 indicates that the sampled respondents agree with communication messages that support HIV-positive patients and AIDS patients to live harmoniously with the general population in society. The mean score for the message, **“People who can live harmoniously with HIV-positive patients are commendable”** was revealed to be ($M = 1.93$), while that for **“Enabling HIV-positive patients to work and live harmoniously with the society will make the Thai society a better place to live in”** found being ($M = 1.90$). However, the sampled respondents agreed with the discriminating message regarding separation of treatment areas for HIV patients and AIDS patients. The mean score for the message **“Standardized hospitals should separate treatment areas and medicine reception counters of HIV-positive patients and AIDS patients from other patients”** was discovered to be ($M = 1.07$), while that for the message **“Although casual contact does not cause HIV infections, this could increase your risk of other infectious diseases, including tuberculosis and various skin infections”** was revealed to be ($M = 1.20$).

Table 3 shows the findings of attitudes toward communication messages concerned with HIV-positive patients and AIDS patients.

Statement	Feeling Number (Percent)			S.D.	Means/ Interpretation
	Agree	Disagree	Not sure		
1. Those who stay with people with HIV without discrimination is respectful.	298 (74.50)	21 (5.25)	81 (20.25)	.271	1.93/ Agree
2. An accredited hospital must separate treatment and the drug counter of HIV/AIDS patients from the other illnesses.	195 (48.75)	28 (7.00)	177 (44.25)	.333	1.07/ Agree
3. A good public health professional must disseminate the information about how to live with people with HIV/AIDS although the local communities show no interest in such information.	296 (74.00)	42 (10.50)	62 (15.50)	.330	1.88/ Agree
4. To allow the people with HIV work and live with others in society which normally make Thai society a pleasant place to live.	294 (73.50)	32 (8.00)	74 (18.50)	.319	1.90/ Agree

Remark: Mean scores and standard deviations have been calculated by excluding participants that gave the response “uncertain” (total mean score 2.00).

4. HYPOTHESIS TESTING: THERE IS A POSITIVE RELATIONSHIP BETWEEN THE DEMOGRAPHICS OF THE POPULATION, ATTITUDES TOWARD HIV-POSITIVE PATIENTS AND AIDS PATIENTS, AND ATTITUDES TOWARD COMMUNICATION MESSAGES THAT AIM TO REDUCE STIGMATIZATION AGAINST HIV-POSITIVE PATIENTS AND AIDS PATIENTS.

Table 4 shows the relationship between the demographics of the population, attitudes toward HIV-positive patients and AIDS patients, and attitudes toward communication messages that aim to reduce stigmatization against HIV-positive patients and AIDS patients.

Items	Sex	Age	Education	Children
Attitude toward people with HIV and AIDS				
1. Attitude towards those without symptoms	1.698	9.045*	26.688***	1.360
2. Forced HIV Testing before ordain	3.810	13.846**	29.094***	.148
3. Forced HIV Testing before job application	.889	2.683	7.760	9.147**
4. Have a meal with a family member with HIV	1.338	12.511**	3.970	7.540**
5. Have a meal with a close friend with HIV	.304	12.442**	6.641	6.392*
6. Take care of a family member with AIDS	.150	8.511*	2.398	9.267**
Attitude toward key messages				
1. Those who stay with people with HIV without discrimination is respectful.	.042	5.975*	2.534	1.998
2. An accredited hospital must separate treatment and drug counter of the HIV/AIDS patient from the other illness.	1.409	3.049	8.410*	4.665*
3. A good public health professional must disseminate the information about how to live with people with HIV/AIDS, although the local communities show no interest in such information.	.553	1.009	17.377***	
4. To allow the people with HIV work and live with others in society which normally make Thai society a pleasant place to live.	.173	11.091*	16.395***	

Remark: *** P- value <.001, ** P-value <.01, * P-value <.05

As indicated in Table 4, the hypothesis testing findings by using Pearson's Chi-square test found that there is a positive relationship between the relationship between the demographics of the population, attitudes toward HIV-positive patients and AIDS patients, and attitudes toward communication messages that aim to reduce stigmatization against HIV-positive patients and AIDS patients at the significant levels of 0.05, 0.01, and 0.001.

Considering the details of the variables in the demographics, the study found that more than half of respondents aged between 31 and 45 (70.7 percent, $c^2 = 9.045$, $p = 0.05$) and more than half of respondents with high school or vocational education (55.8 percent, $c^2 = 26.688$, $p = 0.001$) do not feel disgust towards HIV-positive patients who do not show symptoms.

Additionally, more than half of respondents aged from 31 to 45 years (74.7 percent, $c^2 = 13.846$, $p = 0.01$) and more than half of respondents with a primary education or below (51.3 percent, $c^2 = 29.094$, $p = 0.001$) expressed the opinion that HIV examinations before job confirmation should not be required. Nevertheless, more than half of respondents with children (70.6 percent, $c^2 = 9.147$, $p = 0.01$) feel that HIV examinations should be compulsory prior to job applications. More than half of respondents aged between 31 to 45 years (71.5 percent, $c^2 = 12.511$, $p = 0.01$) and more than half of respondents with children (69.5 percent, $c^2 = 7.540$, $p = 0.05$) are willing to have meals together with family members who are HIV-positive. Furthermore, more than half of respondents aged 31 to 45 years (69.5 percent, $c^2 = 12.442$, $p = 0.01$) and more than half of respondents with children (68.7 percent, $c^2 = 6.392$, $p = 0.05$) are also willing to have meals together with close friends who are HIV-positive. Moreover, more than half of respondents within the age bracket 31 to 45 years (68.3 percent, $c^2 = 8.511$, $p = 0.05$) and more than half of respondents with children (71.4 percent, $c^2 = 9.267$, $p = 0.01$) are willing to take care of HIV-positive family members by themselves.

Regarding attitudes toward communication messages that aim to reduce stigmatization towards HIV-positive patients and AIDS patients, the findings indicate that more than half of respondents aged 31 to 45 years (70.0 percent, $c^2 = 5.975$, $p = 0.05$) agree with the message that **“People who can live harmoniously with HIV-positive patients are commendable.”** However, more than half of respondents with high school or vocational education (70.3 percent, $c^2 = 8.410$, $p = 0.05$) agree with the message that **“Standardized hospitals should separate treatment areas and medicine reception counters of HIV-positive patients and AIDS patients from other patients,”** whereas more than half of respondents with high school or vocational education (50.0 percent, $c^2 = 17.377$, $p = 0.001$) and more than half of respondents who have children (68.6 percent, $c^2 = 4.337$, $p = 0.05$) agree with the message that **“Good public health professionals must provide information and knowledge regarding harmonious living with HIV-positive patients and AIDS patients, regardless of whether the community is interested or not.”** Moreover, more than half of respondents aged 31 to 45 years (68.3 percent, $c^2 = 11.091$, $p = 0.05$) and more than half of respondents with high school and vocational education (51.5 percent, $c^2 = 16.395$, $p = 0.001$) agree with the message that **“Enabling HIV-positive patients to work and live harmoniously with the society will make the Thai society a better place to live.”**

DISCUSSIONS OF FINDINGS

Discrimination and stigmatization of HIV/AIDS patients have been the greatest obstacle to the provision of support and health care services to HIV-positive patients and AIDS patients in the Nong Prue Municipality, Nong Prue Sub-district, Bang Lamung District, Chonburi, Thailand. In this study, it was revealed that middle-aged people, people with high school or vocational education, and people with children do not feel disgust toward HIV-positive patients who do not display symptoms, and they are willing to have meals together with family members and close friends who are HIV-positive. Additionally, they are also willing to take care of HIV-positive family members by themselves. Our finding corroborates with the Bureau of AIDS, TB, and STIs, Department of Disease Control (2015) [11] and Murphy et al., (2002) [27] who found that **(1) middle-aged public health professionals who have children**, do not feel disgust toward HIV-positive patients and AIDS patients and are willing to work and live

harmoniously with them due to their comprehensive knowledge and understanding of HIV infections. Similarly **(2) students** do not feel disgust toward HIV-positive patients and AIDS patients and see the importance of conducting campaigns through a variety of media channels in order to enhance their harmonious living with the general population in society. At the present time, many sectors including the Ministry of Public Health and schools have increased attention towards the problem of AIDS infections and attitudes toward AIDS patients. Consequently, campaigns have been initiated in schools in order to increase their inhabitants' knowledge and awareness of AIDS. Besides, during the World AIDS Day, virtually every school in Nong Prue municipality organizes activities to provide knowledge and increase awareness of HIV/AIDS [32]. Students are the modern generation, hence tend to be open-minded to new knowledge without being attached to misunderstood beliefs. Therefore, they do not feel disgust toward HIV-positive patients and AIDS patients.

Moreover, parents of HIV-positive patients are important figures in motivating HIV-positive patients and AIDS patients reduce stigma towards themselves, which influences their adaptation to the society, thereby enhancing their mental health. This reflects the relationship between good families with close relationships with their children and grandchildren, which is one of the foundations of the Thai society. Consistent with previous studies, this study found that people who have children feel that HIV examinations should be required prior to job applications [14,19,20,32]. Furthermore, the studies also found that low educated people who have children tend to pass on their negative attitudes toward HIV-positive patients to their children, and they expect their children to exemplify the same attitude. Moreover, people with high school or vocational education and people with children agree with the statement that, **“Standardized hospitals should separate treatment areas and medicine reception counters of HIV-positive patients and AIDS patients from other patients”**. Our finding corresponds with the Bureau of AIDS, TB, and STIs, Department of Disease Control (2015) [11] and Stephenson (2009) [33] who found that people with children and family members, with less than a high school or vocational education tend to have misunderstandings about HIV-positive patients and AIDS patients. This is largely due to lack of accurate knowledge and understanding about AIDS infections, and the inaccurate perceptions that HIV-positive patients and AIDS patients tend to be promiscuous, drug addicts, or homosexuals and thus should not receive treatment or should be treated separately from other patients.

In the past, education regarding AIDS was not widespread among schools in Nong Prue. As the preceding target group (people with children and family members with less than a high school or vocational education) grew up and raised children, their inaccurate beliefs were passed down to their children and become deeply internalized, making it hard to change them. Furthermore, when they have children, they become concerned about their children, causing them to have the preceding misunderstandings and inaccurate perceptions.

Regarding attitudes towards communication messages that aim to reduce stigma against HIV-positive patients and AIDS patients, the findings reveal that middle-aged people who have high school or vocational education and people with children agree with the statements that, **“People who can live harmoniously with HIV-positive patients are commendable”**, **“Good public**

health professionals must provide information and knowledge regarding living harmoniously with HIV-positive patients and AIDS patients, regardless of whether the community is interested or not,” and **“Enabling HIV-positive patients to work and live harmoniously with society will make the Thai society a better place to live in,”** confirming the findings of the Bureau of AIDS, TB, and STIs, Department of Disease Control (2015) [11] that **(1) middle-aged public health professionals who have children** do not feel disgust towards HIV-positive patients and AIDS patients. They perceive that people who can live harmoniously with HIV-positive patients are commendable and feel that HIV-positive patients should be supported to participate in activities with the general population in the society. Similarly, **(2) students** were found yearning to gain knowledge from public health professionals regarding how to live harmoniously with HIV-positive patients and AIDS patients, learn about proper methods of using condom, and cultivate opportunities for HIV-positive patients to work for their living similarly to the general population. The preceding research findings reflect the confidence in specialists, i.e. public health professionals, who are perceived as opinion leaders who can reduce the stigma problem. Social media platforms of opinion leaders can be leveraged to create awareness about HIV/AIDS and their credibility used to convince hard-target groups [1].

CONCLUSION

Stigma and discrimination towards HIV-positive patients and AIDS patients are still prevalent in Thai society, taking place in the family, the community, and among the patients. One of the main reasons for this phenomenon is that family members and the community where HIV-positive patients live, still lack knowledge and understanding of the appropriate behaviors to exhibit towards HIV-positive patients and AIDS patients. This research observed that more than half of middle-aged people with high school or vocational education and more than half of respondents with children do not feel disgust toward HIV-positive patients who do not display symptoms. Nevertheless, more than half of individuals with children agree that HIV-examinations should be compulsory prior to job applications. Moreover, people with children and people with high school or vocational education agree with the statement that, **“Standardized hospitals should separate treatment areas and medicine reception counters of HIV-positive patients and AIDS patients from other patients.”** These findings indicate that although the majority of community residents agree with implementing campaigns to enhance HIV-positive patients and the general population to live harmoniously together in the society, some groups especially (1) people with children and (2) people without college education still have latent fear and do not want to have any casual contact with infected patients., Concurrently, (1) students and (2) middle-aged people are open-minded to receiving new knowledge about HIV/AIDS, hence acknowledge the importance of harmonious living with this group. Knowledge and education are held to be the vanguard for eradicating the HIV/AIDS disease. The Department of Disease Control and relevant sectors should implement behavioral change initiatives to change to ensure that HIV-positive patients live harmoniously with the general population in the society.

RECOMMENDATIONS

The Department of Disease Control should provide accurate knowledge about HIV/AIDS to assist the general population reduce irrational fears about the disease. This can be accomplished by conducting campaigns using different forms of mass media and using opinion leaders, experts and specialists in the issue, such as doctors, as well as, famous people, and HIV-positive leaders who are accepted in groups or organizations of HIV-positive patients. Simultaneously, the communication principles used during campaigns should integrate knowledge with entertainment (Edutainment) so that the general population would feel that the issue that they are learning is relevant, instead of perceiving it as irrelevant and disgusting [1]. Furthermore, this strategy could be used to communicate information about HIV/AIDS to people who still express disgust towards HIV-positive patients and AIDS patients in order to change their attitudes and behaviors.

LIMITATIONS

The study used accidental sampling in public places which lacks the opportunity to survey some people, such as those staying at home, including housewives and senior citizens. Moreover, selecting only one sampling area might affect the external validity of the research findings due to generalizing of other communities.

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