# Factors affecting the level of health care worker's stigmatized and discriminatory attitude towards people living with HIV: A study at the Dr. Zainoel Abidin General Hospital, Banda Aceh, Indonesia

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Abstract. The aim of this study was to identify the level of health care worker's (HCW) stigmatized and discriminatory (S&D) attitude towards people living with HIV (PLHIV) and the factors that influenced this attitude. This research was conducted at the Dr. Zainoel Abidin General Hospital (RSUDZA) in Banda Aceh province of Indonesia. A cross-sectional study design was adopted for this research. Eighty nine HCWs were included in this study and they were selected purposively. Pearson correlation analysis, analysis of variance or independent sample t test analysis was used according to the type of data. We found that the level of S&D attitude towards PLHIV in RSUDZA is high. Based on the Least Significant Difference Test, the average score of the answers between nurses and general practitioners and between nurses and medical students was significantly different(p=0.05). Pearson correlation analysis showed that the levels of S&D attitude towards PLHIV was positively correlated with age (r=0.219, p=0.04) and irrational fear of HIV transmission (r=0.352, p=0.001) and negatively correlated with knowledge about HIV/AIDS (r=-0.336, p=0.001). Pearson correlation analysis also found that knowledge of HIV/AIDS negatively correlated with the irrational fear of HIV transmission (r=0.382, p=0.000). In addition, the level of S&D attitude towards PLHIV was also associated with marital status of HCWs (p=0.020). Gender, education level, religion and the importance of religion in HCW lives wasn't significantly affect to the level of S&D attitude towards PLHIV in HCW. We concluded that the factors that influence the level of S&D attitude towards PLHIV among the HCW are age, marital status, knowledge of HIV/AIDS, irrational fear of HIV transmission and HCWs occupations. To reduce S&D attitude towards PLHIV among the HCWs, we recommend introducing some program to increase knowledge of HIV/AIDS.

Key words: Stigma, discrimination, PLHIV, HIV, health care worker.

# Introduction

The study on HIV- and AIDS-related stigma and discrimination is important from both public health and human rights perspectives (Aggleton & Parker, 2005). Studies found that experience of stigma and discrimination or fear of being stigmatized and discrimination produce anxiety, depression, guilt, isolation, low self-esteem, disruption of family dynamics, physical and emotional violence, intensification of grief, and loss of social support, which in turn influence the HIV-positive people toward seeking voluntary counselling and testing, accessing HIV treatment and care, adhering to antiretroviral therapies, accessing education and information on preventive behaviours, and attending programs to prevent mother-to-child transmission, all of which have a great impact on public health. (Brown *et al.*, 2003; Hossain & Kippax, 2011; UNAIDS, 2002)

Stigmatized attitudes toward people living with HIV (PLHIV) are not prevailing only among the general public at large, but several studies from developing and developed countries have indicated that the existence of high levels of stigmatized and discriminatory attitudes among HCWs also (Bharat *et al.*, 2001; Hossain & Kippax, 2010, 2011). HCWs' discriminatory attitudes include HIV testing without consent, pretest and posttest counselling, and denial of treatment and care. The health care providers also breach the confidentiality of the HIV status of the patient, which in turn creates social stigma and insecurity in HIV-positive people (Hossain & Kippax, 2011).

Stigmatized and discriminatory attitudes towards PLHIV among HCWs have been observed in many countries. There has been no study of discriminatory attitudes among HCWs, and to date, the only information available in Aceh. In this context, this study was conducted to explore stigmatized and discriminatory attitudes towards PLHIV among healthcare workers HCWs in Aceh.

# **Materials and Methods**

## Study design and participants recruitment

This study was cross-sectional in nature, conducted in a teaching hospital, Dr. Zainoel Abidin General Hospital, Banda Aceh, Indonesia. HCWs (doctors, nurses, and medical student intern) were recruited. A total of 89 HCWs were interviewed. HCWs were selected purposively and therefore no participation rate was calculated. Data were collected on August 2011.

## Procedure

A structured questionnaire was developed for data collection based on Hossain & Kippax (2011, 2011) study. The questionnaire covered the following issues: sociodemographic, cultural, and religious variables; transmission and prevention knowledge about HIV; irrational fear about transmission of HIV; and stigmatized and discriminatory attitudes toward PLHIV. Data were collected by using the face-to-face interview technique.

#### Measures

#### Dependent Variables

Stigmatized attitudes in this study were measured by a set of items that reflected HCWs' avoidance feelings toward PLHIV in hypothetical situations. Fifteen items were selected from available literature to measure avoidance attitudes toward PLHIV in hypothetical situations among the HCWs based on study that have conducted by Hossain & Kippax (2011). Items were measured on a 5-point Likert-type scale: 1 = Disagree strongly; 2 = Disagree somewhat; 3 = Neither agree nor disagree; 4 = Agree somewhat; and 5 = Strongly agree. Discriminatory attitudes was measured via 16 items selected covering both social- and healthcare-related discriminatory attitudes towards PLHIV. The items were selected from previous research that have used by Hossain & Kippax (2010). The HCWs were asked to rate each item on a five-point Likert scale, indicating their agreement or disagreement.

### Independent Variables

The following independent variables were used to determine the correlates of stigmatized and discriminatory attitudes: age, sex, education, occupation, religion, importance of religion, marital status, having direct contact with PLHIV at work, knowledge about HIV and AIDS and irrational fear about HIV. A 10-item instrument was designed to measure the knowledge on HIV and AIDS among the HCWs. Responses were "true," "false," and "do not know," where "do not know" was considered an incorrect response. Twelve items were selected to assess irrational fear about transmission of HIV among the HCWs. Items responses were "true," "false," and "do not know," where "do not know" was considered an incorrect response.

#### Statistical analysis

Correlation coefficients were used for examining the relationship between the dependent variable and other continuous and scale-independent variables in bivariate analysis, and one-way analysis of variance (ANOVA) was used for examining the association between the dependent variable and the categorical and ordinal-level independent variables in bivariate analysis.

# **Results and Discussion**

Stigmatized and discriminatory attitudes among HCWs were common in this study and this finding is similar to the findings conducted outside Indonesia. In this study, irrational fear about HIV transmission was found to be one of the predictors of stigmatized and discriminatory attitude toward PLHIV. A similar result was found in the study conducted by Hossain & Kippax (2011) who found that irrational fear produces discrimination toward PLHIV. Causes of irrational fear about HIV transmission is complex. Hossain and Kippax (2011) said that irrational fear is associated with the positioning of PLHIV as "other," already stigmatized groups in the society such as homosexuals, sex workers, injecting drug users. Thus, the fear about transmission of HIV is mostly psychological, based on prejudice and irrational beliefs.

Variable	Mean	Std. Error	95% CI	Sig.
	difference	Difference		
Sex	-2.593	4.048	-10.7-5.6	0.525
Education	8.414	4.454	-0.4-17.3	0.062
Religion	11.054	9.597	-8.0-30.1	0.253
Marital status	-8.938	3.442	-15.8-2.1	0.020*
Have any direct contact with HIV-positive people	-2.836	3.515	-9.8-4.1	0.422
Importance of religion in respondent's life	4.001	5.509	-6.9-14.9	0.470

Table 1. T test analysis for stigmatized and discriminatory attitude of healthcare workers with selected independent variables.

Table 2. Pearson correlation analysis for stigmatized and discriminatory attitude of healthcare workers with ratio scale independent variable.

nearthcare workers with ratio scale independent variable.					
Independent variable	n	Person	Sig. (2-tailed)		
		Correlation			
Age	89	0.219	0.040		
Knowledge on transmission and prevention of HIV	89	-0.336	0.001		
Irrational fear of HIV transmission	89	0.352	0.001		

It was found in several studies that age was a negative predictor of stigma attitude (Letamo, 2003) whereas in other studies age was found to be a positive predictor (Hossain & Kippax, 2011; Lau & Tsui, 2005). In this study, age was positively related to stigmatized and discriminatory attitude of HCWs. This maybe reflects that the younger generation of Indonesia is more modernized in their thinking than the older generation and that they are more ready to accept PLHIV. In this study, knowledge on transmission and prevention of HIV was found to be one of the positively predictors of stigmatized and discriminatory attitude toward PLHIV. Multicolinearity was found between knowledge on transmission and prevention of these two variables was -0.382 (level of irrational fear decreased with the increment of knowledge on transmission and prevention of HIV (data not shown).

The findings of this study have serious implications for public-health policy planners and human rights activists. High levels of discriminatory attitudes among the HCWs influence the decision-making process of the people living with HIV and AIDS and stop them from accessing voluntary counselling and testing, care, support, and treatment services. Additionally, experience of discrimination increases the depression and reduces the level of self-esteem among the HIV-positive people, which is adversely related to a number of issues, i.e. high-risk behaviour for transmitting HIV to others, low self-efficacy, and low adherence to antiretroviral therapy.

To have a full understanding of stigmatized and discriminatory attitude of HCWs, they should be studied in the context of the broader socioeconomic milieu in which they live and work. First, class structure and power relations between the HCWs and the PLHIV should be considered. Second, the attitudes of HCWs are influenced by the society's existing perceptions towards HIV-positive people; for example, people will not visit those HCWs who provide treatment to HIV-positive people. Discriminatory attitudes among the general public constrain HCWs from treating HIV-positive people. Third, safety in the workplace is a concern for HCWs. The HCWs became more fearful in the absence of universal precaution in the healthcare system, and this also evokes discrimination towards PLHIV.

This study is not, however, without limitations. First, self-reported stigmatized and discriminatory attitude, instead of actual stigmatized and discriminatory behaviours, were studied. These attitudes were measured by some specific hypothetical questions, and hypothetical questions may suffer from bias due to the possibility of respondents providing

responses that are socially acceptable rather than being correct which can be termed social desirability bias.

# Conclusions

In this study, marital status, age, knowledge on transmission and prevention of HIV and irrational fear of HIV transmission ware found to be one of the positively predictors of stigmatized and discriminatory attitude of HCW toward PLHIV. On the other hand, high knowledge about HIV and AIDS produces less stigma and discrimination toward PLHIV.

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