Stigma Towards People with Schizophrenia Among the Health Study Students: Faculty of Medicine, Faculty of Psychology, and Department of Counseling in Jakarta

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Abstract
Stigma and discrimination against persons with mental disorder has been a global issue. The negative impacts of this includes serious barrier to supportive government policies and detrimental effects to the quality of life of the stigmatized persons. Earlier studies suggest that stigma has been observed among professionals such as medical doctors, nurses, and counselors. This research aims to understand how students of related academic fields such as medicine, psychology, and counseling regard persons with schizophrenia as measured by the Bogardus Social Distance Scale. The study was conducted to 230 students studying in health-related fields (Medicine, Psychology, and Counseling students). Analysis of data were conducted with an independent t-test, One-way ANOVA, and Simple Regression techniques. The results show that students from the health-related field have serious issues with stigma. The majority of the students are not willing to include a person with schizophrenia as their family member or caregiver. Students who have had earlier contact them tend to have lower stigma. However, students who have family members with schizophrenia have a higher stigma. The medical students tend to have higher stigma compared to psychology and other students.

Keywords: Professional stigma, schizophrenia, Social Distance Scale, stigma by association

1. Research Background
In 2017, the World Health Organization (2017) reported a total of 21 million people in the world who experienced schizophrenia (WHO, 2017). The burden of disease continues to increase globally with a significant impacts on health financing, social consequences, human rights enforcement, and economies (World Health Organization, 2017). In addition to the ever-increasing numbers, the quality and standards of treatment and care raised serious concern among mental health authorities and experts. In the period of the report, between 75% and 85% of people with mental health disorders in developing countries were not treated for their condition. There are more than 50% of people with schizophrenia in the world who do not receive the treatment.
they deserve. 90% of people with schizophrenia who do not receive treatment come from middle and low income countries, including Indonesia (WHO, 2017).

The Ministry of Health’s Basic Health Research (Riskesdas) in 2018 showed that the prevalence of serious mental disorders in the Indonesian population was 1.7 per 1000 population or around 400,000 people. The Social Service of the DKI Jakarta Provincial indicated that the number of people with mental disorders in Jakarta continues to increase (Mediani, 2017). Serious mental disorder is a condition characterized by impaired ability to assess reality (Riskesdas, 2013). Symptoms that accompany this disorder include hallucinations, delusions, disturbances in thought processes, and strange behavior, such as aggressiveness or catatonic behavior. Severe mental disorder is known as psychosis, and one example of psychosis is schizophrenia (Riskesdas, 2013). A lot of people with schizophrenia in Indonesia do not have access to modern treatment and care. They were shackled by family members to restore order and safety in the family and in the community. Based on the study by the Human Rights Watch (2016), more than 57,000 people with mental disorders in Indonesia have been chained and locked in a small room for at least once in their lives. About 18,000 people are still in Pasung today (see also Schwarz, 2016).

Generally people are ready to respond to any behavioral cues of anybody in normal social setting. In contrast, however, people are generally not prepared to deal with stranger and their “strange” behavior. In order to respond to the situation the stranger is reduced or simplified only as what is presented Responses to the situation, among others, is triggered by the existence of a set of assumptions and expectations and certain emotion triggered by the imagery following the cognitive representation. A Negative, bad, or frightening imagery of the stranger will elicit aversive or defensive respond (Goffman, 1963).

Stigma originates from the sustained negative cognitive representation of a person or a specific group of people based on their assumed social and behavioral identities (see also Dijker & Koomen, 2003). According to Goffman (1967) visibility of the negative characteristics of the stigmatized is the factor that most triggers these negative emotions. Public stigma is a society’s attitude that supports prejudice and discrimination against social and ethnic minority groups (Gaebel, Rossler, & Sartorius, 2017).

Unfortunately, in this modern society, mental disorders have been identified as one of the most stigmatized attributes of a person (Hefflinger & Hinshaw, 2009). People with mental disorders not only have to deal with psychological, cognitive, and biological symptoms, but they also have to deal with various negative consequences that come from the general stigma of society. Examples are social exclusion, poor services, limited opportunities for work and education, which of course interfere with their quality of life (Rüsch et al, 2005). Therefore, such stigmatizing attitudes have a significant impact on the chances of recovery of people with mental disorders (Corrigan, Roe, & Tsang, 2011).
Although long overdue, Indonesia finally enacted Law Number 18 of 2014 concerning Mental Health as a separate law in the health sector. This law is considered by health professional as a breakthrough to call for public awareness as well as in public investment in health. The law provides the legal foundation for The Pasung Free Indonesia Movement which was initiated in 2010 after Times magazine and BBC sequentially reported the horrible treatment of personas with Schizophrenia in Indonesia (Schwarz, 2016; Aulia, 2016; Edwin, 2017).

Fighting against stigma is a complex and long term issue. Many kinds of stigma have been circulated intergenerationally around certain incidents, especially leprosy infection, TB, and mental disorder.

Ironically, the health professionals who should be leading the campaign against stigma and discrimination have shown moderate social distancing to people with mental disorders. It seems that cultural beliefs and misinterpretations regarding mental disorders remain in the minds of these professionals (Chidozie, Chioma, & Omamurhomu, 2016). Research conducted in Brazil by Loch, Hengartner, and Guarniero (2013) shows that psychiatrists have stronger prejudices and higher social distancing scores than the general public regarding people with schizophrenia (Gaebel, Rossler, & Sartorius, 2017). This is in contrast to research conducted on psychiatrists, nurses and psychologists in Switzerland and found that these health professionals also have the same social distance as the general public towards people with mental disorders (Nordt et al, 2006). Research by Hori, Richards, Kawamoto, and Kunugi (2011) shows that psychiatrists generally have a positive view of people with mental disorders (schizophrenia), but still show a certain social distance in patients with mental disorders (Gaebel, Rossler, & Sartorius, 2017).

Although those studies were socially contextualized, we were compelled to assume that stigma and prejudice toward persons with mental disorder was not resolved during academic and professional education. A number of studies supported this assumption.

A study by Chew-Graham et al (2003) indicated that the attitudes of medical students are strongly influenced by their experiences during their studies, not only during their psychiatric placement, but also in their interactions with other doctors in various disciplines. Therefore, the entire culture in a medical school plays an important role. They observed that student attitudes were in fact deteriorated when they graduated. One similar study recorded incident of senior medical students using derogatory terms to people with mental disorders (Korszun, Dinos, Ahmed, & Bhui, 2012). Similar findings were reported by Arvaniti, Samakouri, Kalamara, Bochtsou, Bikos, & Livaditis (2009) who observed that medical staff and students could have negative attitudes about patients with mental disorders (Arvaniti et al, 2009).

Further exploration of this issue, suggest that when students were earlier and frequently exposed to persons with mental disorder, they learned how to respect and
treatment them professionally. A study conducted in Istanbul showed that medical students in their sixth year of study had better attitudes towards people with mental disorders when compared to first-year students (Ay, Save, & Fidanoglu, 2006). This and similar studies suggest the importance of a curriculum that is intentionally designed to provide opportunities for students to know their clients and to resolve their prejudice and stigma while learning their professional skills.

The attitude of students towards people with mental disorders needs to be understood, because overcoming the stigma since they are still in their training and education environment will be an easier way to prevent stigma they work as professionals (Pamungkas, Linawati, & Sutarjo, 2016).

Therefore, the aim of this study is to understand the attitudes of students in the health and health-related professions education towards people with schizophrenia. We consider this goal important to understand the role of future mental health professional in order to improve clinical and public services towards persons with mental disorder.

2. Research Methodology

To answer the research objectives, a cross-sectional survey was conducted regarding social distance as measured by the Social Distance Scale (SDS) of Bogardus (Hatzenbeuhler, Phelan, Link, 2013; Link, Cullen, Frank, and Wozhiack; 1987).

2.1 Participants

Data were collected from full-time, undergraduate students at private university in Jakarta. The sample was drawn from the field of health studies which are Faculty of Medicine, Faculty of Psychology, and Department of Counseling. All of the students had received material about mental disorders. Sample were selected purposively from the total population of 1,920 students from the field of health studies at University A in 2018. The number of participants is summarized in Table 1.

| No | Faculty             | Participants |
|----|---------------------|--------------|
| 1  | Medicine            | 143          |
| 2  | Psychology          | 67           |
| 3  | Dept. of Counseling | 20           |
|    | Total               | 230          |

2.2 Questionnaires

The instrument used for this study was the Social Distance Scale (SDS) of Bogardus (Hatzenbeuhler, Phelan, Link, 2013; Link, Cullen, Frank, and Wozhiack; 1987) modified by Link, Cullen, Frank, and Wozhiack (1987). It has seven items that describe different social relationships. Participants can determine the extent to which they are willing to accept
someone described in the vignette (with mental disorders) using a Likert scale (Dadun, Peter, van Brakel, Lusli, Damayanti, Bunders & Irwanto, 2014).

This scale has 7 items representing different degrees of social distance. Item has four response options: Very willing (0 points), maybe willing (1), maybe not willing (2) and very unwilling (3). The total score of each item which is all the same weight was used as the overall score and higher scores reflect a higher level of social stigma. Based on the Likert scale analysis, there is no difference in the score for each item. The level of relationship depicted on each item is considered the same (Dadun et al, 2014). The variable to be examined in this study is stigma. The higher the SDS total score, the higher the stigma. Conversely, the lower the SDS total score, the lower the stigma.

This category indicates that participants with low social distance are participants who are willing to include people with schizophrenia in any social relationship. Participants with moderate social distance are participants who are not willing to include people with schizophrenia in just one social relationship. Meanwhile, participants with high social distance are participants who are not willing to include people with schizophrenia in various social relationships. Social relations are described through different situations in each item. In the main data analysis, the statistical test conducted was an independent sample t-test to see the comparison between the stigma of participants who had contact with people with schizophrenia and participants who had no contact with people with schizophrenia.

The SDS used in this study has been validated by Dadun et al (2014) to measure the stigma of leprosy in Cirebon, Indonesia. But for this study, the SDS vignette was modified from a story of a leper to a schizophrenic, without changing the items. The vignette was developed according to the vignette used in the mental health field by Angermeyer, Buyantugs, Kenzine, and Matschinger (2004).

2.3 Statistical Analysis

In the main data analysis, the statistical test conducted was an independent sample t-test to see the stigma between participants who had contact with people with schizophrenia and participants who had no contact with people with schizophrenia.

In the analysis of additional data, the researcher compared those with non-health subject areas. The majors are Electrical Engineering, Law, Communication, and Accounting. The statistical test carried out in this section is Anova One Way to see the comparison of stigma in each department (from health and non-health study fields). Multiple Linear Regression statistical test was also conducted to see the factors that most influence the stigma of the participants.

3. Results and Discussions

This study found that the mean score of social distance is 103 and Shapiro-Wilkinson normality test suggests that scores are distributed normally (SD = 4.3;
Saphiro-Wilk = .059 p > .05). Table 2 provides ranked social distance scores of all participants toward person with schizophrenia.

Table 2. Ranked Social Distance Scores of all participants (n = 230)

| Rank  | Sub-total | %   |
|-------|-----------|-----|
| High  | 108       | 78% |
| Medium| 26        | 11% |
| Low   | 24        | 10% |
| Total | 230       | 100%|

Table 2 above shows that the majority of participants in health-related field have high social distance scores toward persons with schizophrenia. The distribution of high, medium, low stigma based on the faculties can be seen in Table 3. Faculty of Medicine ranked the highest of participants with high social distance (83.29%), followed by participants in the Faculty of Psychology (78%) and Department of Counseling (60%). The highest mean score of social distance is in Faculty of Medicine (M = 11.3), followed by Counseling (M = 9.2) and the lowest is in Faculty of Psychology (M = 8.9).

Table 3. Ranked Social Distance Scores based on the faculties (n = 230)

| Rank  | Medicine (Mean = 11.03) | Psychology (Mean = 8.9) | Counseling (Mean = 9.2) |
|-------|-------------------------|-------------------------|-------------------------|
| High  | 119 (83.2%)             | 49 (73.1%)              | 12 (60.0%)              |
| Medium| 11 (7.6%)               | 10 (15%)                | 5 (25%)                 |
| Low   | 13 (9.0%)               | 8 (11.9%)               | 3 (15%)                 |
| Total | 143                     | 67                      | 20                      |

According to Table 4 below, the content of the items determined the reactions of participants. If we look closer to the content of the item, we found that the highest social distance is on care giving and marriage to our child. In addition to the standardized scale, we added a question asking if in they ever had any contact with a person with schizophrenia. We would like to know what kind of contact experience that may affect their level of stigma (social distance) with persons with schizophrenia. Based on the percentage of participants in each available answer option in Table 4, 92% of participants are willing (perhaps willing or very willing) to include people with schizophrenia in a relationship with a low level of closeness, namely as neighbors. The majority of participants were unwilling (perhaps unwilling or very unwilling) to include people with schizophrenia in high-level relationships, namely as family (83%) or caregivers (75%).
Table 4. Social distance according to the situation from the vignette (n = 230)

| Are you willing to | Very Unwilling | Maybe Unwilling | Maybe Willing | Willing |
|--------------------|----------------|-----------------|---------------|---------|
| Rent a room to R*? | 12%            | 26%             | 29%           | 13%     |
| Accept R* as a co-workers? | 6%           | 20%             | 58%           | 16%     |
| Accept R* as your neighbor? | 2%           | 5%              | 49%           | 43%     |
| Accept R* to care for your child? | 34%          | 41%             | 19%           | 6%      |
| Marry your child to R*? | 42%          | 41%             | 13%           | 4%      |
| Introduce R* to your friend? | 16%          | 38%             | 37%           | 9%      |
| Suggest R* to work for your friend? | 8%           | 22%             | 57%           | 13%     |

*Person in the vignette is a guy called Rahman

Table 5 Difference level of stigma according to the kind of contact (n = 230)

| Having contact | Freq | Freq | Means (SD) | t-value | Sig |
|----------------|------|------|------------|---------|-----|
| family member  | Yes  | 6 (3%) | 10.2 (6)  | -0.063  | .95 |
|                | No   | 224 (97%) | 10.3 (4)  |         |     |
| Close friends  | Yes  | 6 (3%) | 7 (3)     | -2.030  | .043*|
|                | No   | 224 (97%) | 10 (4)    |         |     |
| Just knowing (no family/friend relationship) | Yes | 58 (25%) | 9 (4.4)  | -2.16  | .031*|
|                | No   | 172 (75%) | 11 (4.1)  |         |     |
| Ever taken care of persons with schizophrenia | Yes | 9 (4%) | 7 (5)    | -2.48  | .014*|
|                | No   | 221 (96%) | 10 (4)    |         |     |

The results of this study indicate that the majority of students in the field of health studies have a high stigma against schizophrenics. This results partly support Arvaniti, Samakouri, Kalamara, Bochtsou, and Livaditis (2009) study. Arvaniti et al (2009) also conducted research on students from the field of health studies. The results of this study found that second and fourth year students had high stigma. However, senior students have lower stigma (Arvaniti et al, 2009). The majority of students in this study were in their third and fourth years and had received courses that explained mental disorders, including schizophrenia. This knowledge helps students recognize the symptoms described in the vignette.

Interestingly, students with medical knowledge about mental disorders described in the vignette still give a high stigma, the same as students who do not get this course.

In Lauber, Nordt, and Fal (2004) study, it is explained that the increase in social distance is predicted by a number of factors, namely the correct identification of someone who is described in vignette as someone who is affected by a disorder, an attitude of supporting the medical approach as an appropriate treatment, and knowledge and awareness of negative symptoms or negative consequences from the
disorder. Therefore, having medical knowledge about mental disorders without adequate professional exposures can lead to higher social distance (Lauber, Nordt, & Fal, 2004).

Based on research conducted by Arvaniti et al (2009), it shows that medical knowledge in students from the field of health studies must be balanced with personal contact with people with schizophrenia. Furthermore, Arvaniti et al (2009) explained that student social distance tends to decrease when students have completed internships in the mental ward. These results are consistent with research conducted by Sireesha, Usha, and Kumar (2015) and Konwar, Pardal, Prakash, & Rythem (2012). In accordance with the existing curriculum, at the Department of Medicine, students in the sixth year are required to attend psychiatry internships. Likewise with the Clinical Psychology Department, master level education program (S2). Personal contact with people with mental disorders that occur while students are participating in the internship can improve exposure and interacting with people with mental disorders that result in reduced professional stigma. Consequently, students who are more knowledgeable and have had contact with mental patients tend to have a low stigma against them (Aghukwa, 2010).

**Stigma and Experience of Caring for People with Schizophrenia**

The results of this study also indicate that the most influencing factor that reduce stigma is having experience of caring for people with schizophrenia. Students (from all majors) who have cared for people with schizophrenia show lower social distance. These results are consistent with research conducted Konwar et al (2012), and Sireesha, Usha, and Kumar (2015) and Lee and Seo (2017). The experience of caring for people with schizophrenia, in this study, was the most influential factor of different forma of contact such as having close friends, close relatives, or just knowing other people with mental disorders.

According to Allport’s (1954) contact hypothesis, stigma can be reduced through the contact of majority and minority groups by the existence of equal status between the two groups in achieving common goals. The impact of this contact will increase if it is strengthened by institutional support (for example through an institutional policy/regulation, cultural norms and values, and supportive family and community environment). Availability of positive social support can reduce feelings of uncertainty and anxiety and promotes a more positive attitude (Pettigrew, 2008; Gaebel, Rössler, & Sartorius, 2017).

The contact hypothesis suggests that any form of contact will lead to a more positive attitude change, capable of creating new expectations and ultimately leading to greater opportunities for interaction (Lee & Seo, 2017). Then Lee and Seo (2017) in their research show that personal contact is the form of contact most influential in reducing production of imageries that represent risks and danger.
Alexander and Link (2003) argue that this contact helps society learn that people with mental disorders are not as dangerous as they might think or expected. In addition, students who have treated people with mental disorders can witness the benefits of medical treatment in the lives of people with mental disorders (Chung, Chen, & Liu, 2001). Therefore, caring for people with mental disorders is a form of personal contact that gives students the opportunity to interact with them. In good treatment contact, it allows for collaboration on equal status and common goals between students and people with mental disorders.

**Stigma and Family**

The results of this study indicate that participants who have close relatives (family) do not show significant differences with participants who do not have close relatives (family) of people with schizophrenia. Participants who have close relatives (family) with mental disorders have the highest stigma, when compared to participants who have close friends, have cared for, and know people with schizophrenia. The difference in these results shows that students who have relatives or families with mental disorders still show higher stigma.

According to Gaebel, Rössler, & Sartorius (2017), family gives a higher stigma than people who do not have family relationships because the family considers people with mental disorders to be a family burden (Gaebel, Rössler, & Sartorius, 2017). Goffman (1963) named the stigma of someone who has a family relationship with people with mental disorders as courtesy stigma or stigma by association. The term is given to the stigma attached to people who have attachments to people with mental disorders, such as family (Goffman, 1963). One of the important issues regarding stigma is the burden on the family. This may increase due to lack of access to mental health and rehabilitation facilities. The situation is worsening when different members of the family demonstrate negative behavior and attitudes to their relative, especially perceived as problematic and incapable of living independently (Gaebel, Rössler, & Sartorius, 2017).

Therefore, the high stigma of students who have close relatives (family) is assumed to be due to courtesy stigma. This causes they’re not willingness to include people with schizophrenia in social relationships because they perceive people with mental disorders as someone who is not competent to live independently and will become a burden or liability on the family (Sheehan, Nieweglowski, and Corrigan, 2017).

**4. Conclusions**

The findings from this study can refer to the impact of unexpected mental disorders and can serve as suggestions for formulating further anti-stigma strategies. The focus of anti-stigma programs is not only on the dissemination (transmission) of knowledge, but also integrating different approaches, such as increasing personal contact with mental disorders. Personal contact that is supported by the institution and
a positive environment since college can reduce misconceptions about people with mental disorders.

Students in health-related professions are the backbones of public policy to improve access to quality health services which improve prognosis and sustainability. This study confirms previous study that earlier professional contact with mental disorder patients/clients should be embedded within the professional education and training curriculum. Tackling professional stigma as early as possible in the course of training and education is considered as an effective anti-stigma strategy.

The Bogardus Social Distance Scale is still a very useful measure of social attitudes like stigma. Although the items may potentially socially desirable, careful vignette construction may reduce such tendency, especially by avoiding stigmatized words or terms and maintain factual description of the vignettes. In-depth interview following SDS may be useful to highlight deeper values and other aspects of stigma that may be important to consider in any stigma reduction attempts.

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