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To cite this article: P C Eyanoer 2018 IOP Conf. Ser.: Earth Environ. Sci. 125 012101

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Social acceptance among tuberculosis patients at Puskesmas Amplas Medan, Indonesia

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Abstract. Social acceptance is a confession, compilation, and appreciation for an individual which come from other individual or social groups in their entirety which makes individual feels safe, comfortable, and their existence is appreciated. A cross-sectional study consisted of 42 pulmonary TB patients registered at Puskesmas Amplas was done to analyze their social acceptance in the society. Data was collected by direct interview using structured questionnaire. The result showed that majority had either high and very high social acceptance with 45.20% and 31.0% respectively with high family support and high self-confidence (73.8%). Bivariate analysis showed a significant association between family support and self-confidence with social acceptance ($p$ value <0.05). The correlation coefficient ($r$) of self-confidence is 0.629 while family support were is 0.455 ($p$-value <0.05). This study concludes that both family support and self-confidence have a significant correlation with social acceptance.

1. Introduction
Tuberculosis (TB) is the second most deadly disease in the world after HIV / AIDS which caused by a single infectious agent named Mycobacterium tuberculosis. The World Health Organization (WHO) mentions that 2-3 billion people worldwide have been infected with Mycobacterium tuberculosis and may one day develop into Tuberculosis (TB). By 2015 it is estimated that 10.4 million suffer from TB and 1.8 million die due to TB. Sixty percent of these deaths come from 6 countries, with India as the highest, followed by Indonesia, China, Nigeria, Pakistan and South Africa.[1,2]

Based on Riskesdas (Basic Health Research) from KemenKes RI (2013), the prevalence of population in Indonesia which diagnosed with pulmonary tuberculosis is 0.4%. The five provinces with the highest pulmonary TB are West Java, Papua, DKI Jakarta, Gorontalo, and Banten. Out of total population diagnosed with pulmonary TB, only 44.4% were treated with drugs programs.[3]

Pulmonary TB is a disease that can be resolved thoroughly through regular and routine treatment for 6-9 months, even more in certain cases. Due to long treatment time, TB patients are very likely to experience severe stress and felt stigmatized.[4,5]

Social acceptance is defined as the acceptance and acknowledgment an individual within a social group, the individual being viewed positively by the group members. The individual can play an active role in his social group and can adapt well to the group. A good social acceptance for TB patient is expected to reduce the stigma that develops in the community about this disease. TB patient should get strong psychological support which proved may increase the number of drug compliance and further increase their life expectancy.[1,6]
Some considerable researches involving social acceptance have been done on several groups. A study from Sutarjo’s has found that social acceptance was strongly influenced by social interactions (p <0.05). Puspitasari stated that a teacher could help the social acceptance of children with Asperger syndrome by their peers by teaching and play together (p <0.05). Arsanti measured the level of social acceptance of students with disabilities and found social acceptance as low as 35.7%. Karina found there was a relationship between self-disclosure and social acceptance (p<0.05).[6-9]

Based on the above, this study interested in analyzing social acceptance among TB patients at Puskesmas Ampla Medan and the influencing factors namely family support and self-confidence.

2. Method
Forty-two pulmonary TB patients were recruited through consecutive sampling in this cross-sectional study. All patients are registered patients in Puskesmas Ampla Medan, Indonesia from January up to August 2017.

All information on family support, patient’s self-confidence, and social acceptance are collected by interviews based on structured and validated questionnaires. Statistical analysis was performed using Spearman correlation.

3. Results
The data retrieval process was conducted on July 25 until August 11, 2017. As illustrated in Table 1, out of 42 registered pulmonary TB patient in Puskesmas Ampla, the majority are aged 21-30 years old (23.80%), male (57.10%), graduated high school (64.30%), self-employed (33.30%), income below national standard (61.90%), confirmed diagnosed by both microscopic and x-ray results (35.70%), with no family history of TB (69.0%).

3.1. Baseline Characteristics

| Characteristics                              | Frequency(n) | Percentage(%) |
|---------------------------------------------|--------------|---------------|
| Age                                         |              |               |
| ≤ 20                                        | 4            | 9.50          |
| 21-30                                       | 11           | 26.20         |
| 31-40                                       | 8            | 19.00         |
| 41-50                                       | 10           | 23.80         |
| ≥ 51                                        | 9            | 21.50         |
| Sex                                         |              |               |
| Male                                        | 24           | 57.10         |
| Female                                      | 18           | 42.90         |
| Education                                   |              |               |
| SD                                          | 2            | 4.80          |
| SMP (graduated elementary)                  | 8            | 19.00         |
| SMA (graduated high school)                 | 27           | 64.30         |
| Diploma                                     | 5            | 11.90         |
| Jobs                                        |              |               |
| Private employee                            | 8            | 19.00         |
| Self-employed                               | 14           | 33.30         |
| Student                                     | 6            | 14.40         |
| Housewife                                   | 10           | 23.80         |
| Others                                      | 4            | 9.50          |
| Income (*based on National Income Standard) |              |               |
| ≤ UMR                                       | 26           | 61.90         |
| ≥ UMR                                       | 16           | 38.10         |
| Diagnosis                                   |              |               |
| Microscopic                                 | 14           | 33.30         |
3.2. Distribution of Social Acceptance, Family Support and Self Confidence among TB patients
To explain/describe the characteristics of each research variable namely the social acceptance, family support, and self-confidence a univariate analysis is performed and results can be seen in Table 2.

| Characteristics                  | Frequency (n) | Percentage (%) |
|----------------------------------|---------------|----------------|
| Social Acceptance                |               |                |
| - Low                            | 10            | 23.80          |
| - High                           | 19            | 45.20          |
| - Very high                      | 13            | 31.00          |
| Family Support                   |               |                |
| - Low                            | 11            | 26.20          |
| - High                           | 31            | 73.80          |
| Patient’s Self confidence        |               |                |
| - Low                            | 11            | 26.20          |
| - High                           | 31            | 73.80          |

3.3. Correlation Analysis of Family Support and Self Confidence with Social Acceptance
To see the correlation between family support and patients’s self-confidence with social acceptance among TB patients a bivariate analysis is performed. The statistical tests performed showed a significant result (p <0.05) which means there is a significant association between family support and patients self-confidence with social acceptance in patients with pulmonary TB.

| Variables          | n  | Correlation Coefficient | Sig.   | Description              |
|--------------------|----|--------------------------|--------|--------------------------|
| Family support     | 42 | 0.455                    | 0.002  | Alternative Hypothesis (Ha) is accepted |
| Self-Confidence    |    | 0.629                    | 0.000  | is accepted               |

Further analysis to identify the magnitude of association was done, and results are illustrated in Table 3. The correlation coefficient (rxy) with p values of 0.002 which means alternative hypothesis (Ha) is accepted.

The magnitude of the correlation coefficient of family support with social acceptance is 0.455 which considered moderate; while for self-confidence is 0.629 which considered highly correlated. The positive correlation revealed that if the value of variable X high, then the value of variable Y will be high as well, and vice versa. Therefore, it can be concluded the higher family support and self-confidence would then increase social acceptance of pulmonary TB patients and vice versa.

4. Discussion
Pulmonary TB is still one of the world’s health problems although in 1995 control efforts with the DOTS strategy (Direct Observed Treatment, Shortcourse Therapy) have been applied in many countries since.[16] Globally in 2012 based on WHO report data, there are as many as 8.6 million people with pulmonary TB in the world with the prevalence of 169 / 100,000 population of the world. The number of TB patients continues to increase in 2013 to 9 million with a prevalence of 159 / 100,000 people worldwide. At present, the success rate of pulmonary TB treatment globally is 86%.[1] In 2015 WHO declared Indonesia as the country with the second most common pulmonary
TB patients in the world as much as 10% of the global total of TB cases in the world. The success rate of pulmonary tuberculosis treatment in Indonesia based on Indonesia health profile data is 81.3%, however, this number has not reached target set by WHO. [17]

In a referred hospital in Medan alone, the number of pulmonary TB out-patient reached up to 1026 while for inpatients was 2560 patients (September 2015-September 2016). These figures show that pulmonary TB is a very common disease in the community. Such an enormous problem caused by TB invites experts to seek preventive, curative and rehabilitative measures to reduce TB-induced morbidity and mortality.

The shortest course of TB treatment which is six month with the number of drugs taken often lead to stress in TB patients. This worsens with stigma circulates on the society. Patients might lose their confidence or perhaps hide their status instead. This research looks into how the family support and patient’s self-confidence help in their social acceptance.

4.1. Family support, Self Confidence and Social Acceptance of TB patients
The study found that 10 out of 42 patients (23.80%) had low social acceptance, 19 (45.20%) had high social acceptance, and only 13 (31.00%) had very high social acceptance. The high social acceptance of pulmonary tuberculosis means that they are able to adapt well in their daily life, able to mingle, to have attractive appearance and personality, being polite, care for others, being honest of what they suffered from, responsible and trustworthy. This indicates that TB patients as part of the community gain recognition and respect both from the surrounding individual and social group. The social acceptance helps pulmonary TB sufferers feel safe, comfortable and respected existence. The results of this study are in line with Sutarjo's study which found that out of subjects who were able to interact socially would have either had moderate (11%) or high (89%) social acceptance. Meanwhile, Arsanti's did a similar study among disabled students found that mostly with low social acceptance, 45.7% versus 35.7% respectively. [7,8]

This study also found that most pulmonary TB patients had high family support and self-confidence (73.80%). The sharing of family support functions includes instrumental support, in which the family is able to provide practical and concrete relief resources. If one family member is sick, the family must be a helper. In addition, the family also has a function as an informational supporter. In this case, the support that can be given is adequate information about the illness of the patient. The latter is emotional support, the family as a safe and peaceful place for rest and recovery as well as help the patient's emotional mastery. The results obtained in line with the Maulidia study shows that 42 (60.90%) had high family support and 27 (39.10%) had low family support. [11]

Self-confidence, on the other hand, is a strong awareness of price and self-ability. People with these skills will dare to appear with confidence, dare to declare its existence, dare to voice an unpopular and willing to sacrifice for the sake of truth and firm, able to make good decisions despite being uncertain and depressed. Self-confidence is also a positive attitude of an individual that enables him to develop a positive assessment of both himself and the environment or situation he faces. This does not mean that the individual is capable and competent to do everything by himself. A person with self-confidence is convinced of his or her independence, confident in himself that it is not excessively selfish that leads to pride, tolerant, optimistic, and unnecessary for him to compensate from his limitations. The results of this study are in line with the Sinthia study which found that there are 186 people (85.70%) have high self-confidence, and 31 people (14.30) people have low self-esteem. [12]

4.2. Correlation between Family Support and Self Confidence with Social Acceptance
The family is the smallest unit most associated with the patient. The family becomes an important element in one's life because it is a system within which there are interconnected members and dependence in giving affection. Family support is a form of interpersonal relationships that include attitudes, actions, and acceptance of family members, so that family members feel there is a concern. Family support is one of the elements that are so needed by TB patients that they can develop themselves and can have psychological strength. With strong family support both financial and
psychological, social acceptance of TB patients will be better. A person who feels loved and cared for by his or her family's eating environment will be more capable and confident of interacting with the surroundings. Good social interaction will automatically result in good social acceptance as well.

The results of bivariate analysis from this study indicate that there is a moderate correlation between family support and social acceptance. This is in line with Kusuma's 2011 study, which mentions a close relationship between family support and the quality of life of HIV / AIDS patients (p = 0.000), further explained that patients without family support had a 21.5-fold increased risk of depression than those who received family support (OR: 21.5). Hutapea research shows the influence of family support on adherence to taking antituberculous medication. The result of analysis shows that p = 0.001 (p <0.05) and correlation coefficient equal to r = 0.210. The results of this analysis indicate that the higher the family support, the higher the level of compliance of patients taking OAT. The same is explained by the Maulidia study which found that TB patients with high family support had a high adherence rate of OAT reaching 90.50%, whereas TB patients with low family support had a medication adherence level of OAT of only 48.10% with p = 0.000.[11,13,14]

Self-confidence as part of social acceptance, a person who has self-confidence will be more confident to do something or enter in an environment, even if the environment is new at all. Thus the self-confident individual is expressed through a calm and balanced attitude in social situations. Confidence is one of the most important aspects of human life. In dealing with other people's self-confidence is formed from self-belief, that a result is indeed within the limits of the ability and personal desires. So, self-confidence is an individual's belief in the ability of self-related attitude and perspective that is influenced by the reaction environment.[12,15]

The result of bivariate analysis from this research indicates that there is a strong correlation between self-confidence and social acceptance. The results of this study are consistent with the Sinthia study found a correlation value between class social acceptance with the self-confidence of 0.6264 with a value of p <0.05. Thus it is stated that there is a significant relationship between social acceptance with self-confidence. Murbani study found that the higher the level of self-confidence then consumptive behavior decreases with the value of correlation coefficient 0.434 and p <0.001.[12,15]

5. Conclusion
We can conclude from this study the importance of patient’s self-confidence in order to feel socially accepted in the surrounding (r=0.629) followed by their family support (r=0.455). Understanding the continuous increase in the numbers of pulmonary TB patients nowadays, it is necessary to educate the society on the disease; not just in how to prevent but how to deal once there is a family or society member infected.

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