DIFFERENCE OF THE TYPE OF DELUSIONS AMONG PATIENTS WITH PARANOID SCHIZOPHRENIA IN JAVANESE AND BATAK TOBA PEOPLE AT MENTAL HOSPITAL OF NORTH SUMATERA

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ABSTRACT

Background. Schizophrenia is a chronic psychiatric illness that characterized by psychotic symptoms such as delusions and hallucinations. The phenomenology of delusions and hallucinations in schizophrenia is influenced by the culture of the patient.

Aims. To see the difference of type of delusions among patients with paranoid schizophrenia between the two ethnic groups in one province and one country.

Methods. Total of subject are 200 outpatients or inpatients, 100 from Javanese and 100 from Batak Toba peoples who diagnosed as paranoid schizophrenia according to the tenth of the International Classification of Disease (ICD-10) were interviewed and assessed using Positive and Negative Symptoms Scale (PANNS). If each score of positive scale (P1 to P7) is ≥ 3, they were included in this study. Then we noted their predominat delusion. The type of delusions on both ethnic groups were analyzed to know whether there is a difference.

Results. The most type of delusion on both Javanese and Batak Toba people is persecutoric, 64% in Javanese and 67% in Batak Toba. Delusion of grandiosity mostly in Batak Toba, totally is 23%. Delusion of reference in Javanese more than in Batak Toba (11%). Delusion of control mostly in Javanese (11%).

Conclusion. There are no significant difference in the type of delusions among patients with paranoid schizophrenia in Javanese and Batak Toba people.

Keyword: Delusions, paranoid schizophrenia, Javanese, Batak Toba

Introduction

Although the prevalence of schizophrenia is similar across diverse cultures, the influential role of ethnocultural factors in the phenomenology and the symptomatic expression of schizophrenia has been widely recognized. There is wide variation in the presentation of patients from different ethnic backgrounds during a schizophrenic episode. Differences in the content of schizophrenic delusions and hallucinations could be successfully interpreted in terms of culture. Religion can act as both a risk and protective factor as it interacts with the schizophrenia symptoms of hallucination and delusions. Cultural influences tend to confound the association of religion and schizophrenia. Adherence to treatment has a mixed association with religiosity. Many studied have reported about difference of type or content of delusion in schizophrenic patient in two different cultures. There is different of delusion in schizophrenic patient in Austria and Pakistan. During the last three decades, efforts have been made towards finding cross-cultural differences in the phenomenology of schizophrenia. These include the World Health Organization’s (WHO) international study of schizophrenia (1973), the comparative study among ethnic groups in England (Nderei & Vadlher, 1984; Suhail & Cochrane, 2002), a study of patients in Japan and China (Fujimori et al., 1988), a comparison between the two subcultures of Malaysia (Azhar et al., 1995),
a comparison between Japanese and Germans (Tateyama et al., 1993), a comparison among patients in Tokyo, Vienna and Tubingen (Tateyama et al., 1998), a comparison of hallucinations between patients in Saudi Arabia and England (Wahass & Kent, 1997), a comparison of secondary symptoms between South Africa and Namibia (Maslowski & Oosthuizen, 1993-1994), and a comparison of the first rank symptoms of schizophrenia between UK and Greek immigrants in Australia (Coffey et al., 1993). These studies have consistently reported that some types and content of delusions and hallucinations may differ among different cultures, which implies that some cultural elements may influence the manifestation of psychotic symptoms in schizophrenia.  

Aims
We want to see the difference of the type of delusions in paranoid schizophrenia in Javanese and Batak Toba peoples. No previous study in Indonesia about type of delusion in paranoid schizophrenia between the two ethnic groups.

Batak Toba is the largest ethnic in all group of Batak people. Batak Toba is a native ethnic who settled in the North Sumatera Province, Indonesia. The Javanese is not a native ethnic in the North Sumatera Province. The Javanese people originated live in Java Island. The most the Javanese people who lives in Medan, the capital of the North Sumatera Province, and in the area around of it is descendents of the worker who was imported gradually from Java Island to Sumatera in 1880 to 1915. They are works in the plantations of the Dutch in eastern Sumatera.

Methods
This study has get permission from Health Research Ethical Committee of North Sumatera University c/o Medical School with license number is 332/KOMET/FK USU/2013.

Between August 2013 and October 2013, a total of 200 patient with paranoid schizophrenia, 100 patients of Javanese and 100 patients of Batak Toba peoples has been selected. Design of this study is analitic research with cross-sectional approach. The technique sampling use nonprobability sampling with consecutive sampling type.

Inclusion criterias are: (1) male or female, (2) diagnosed by paranoid schizophrenia, (3) delusions still exist, score each positive scale of Positive and Negative Symptoms Scale (PANNS) is ≥ 3, (4) subjects are Javanese or Batak Toba peoples, (5) living in Medan or Deli Serdang, (6) subjects are outpatients or inpatients at Mental Hospital of North Sumatera Province, (7) can speak in Bahasa Indonesia, and (8) they were willing to participates. Whereas subjects are excluded if there are comorbidities with general medical disorders, and using substances (except caffeine and nicotine).

Patients from Javanese and Batak Toba people who meet inclusion criterias were interviewed refer to Mini International Neuropsychiatric Interview version International Classification of Disease 10 (MINI ICD-10). The type of delusions were noted. The type of delusions among these two ethnic group, then, will analyzed to see the difference about it. The type of delusions in paranoid schizophrenia are persecutoric, grandiosity, reference, and controlled.

Analysis by chi-square, and if not meet criteria, we used Kolmogorov-Smirnov test.

Data will processing with Statistical Package for Social Science (SPSS) version 22 with significance level is P < 0.05.
The most age of subject is in interval 30 years to <40 years, in Javanese are 34% and 39% in Batak Toba people. The most sex of subject are male, 56% in Javanese people and 76% in Batak Toba people. Based marital status, the most of subject are no married, 55% in Javanese and 61% in Batak Toba. All of Javanese people are Islam, while the most of Batak Toba people are Christian (89%). The formal education level of subject is basic level, 68% in Javanese and 51% in Batak Toba. The most subject are no work, 70% in Javanese and 81% in Batak Toba.

### Tabel 2. Proportion of type of delusion in paranoid schizophrenic in Javanese and Batak Toba people

<table>
<thead>
<tr>
<th>Suku</th>
<th>Jawa</th>
<th>Batak Toba</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Type of delusion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persecurorik</td>
<td>64</td>
<td>64%</td>
<td>67</td>
</tr>
<tr>
<td>Grandiosity</td>
<td>14</td>
<td>14%</td>
<td>23</td>
</tr>
<tr>
<td>Reference</td>
<td>11</td>
<td>11%</td>
<td>4</td>
</tr>
<tr>
<td>Controlled</td>
<td>11</td>
<td>11%</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100%</td>
<td>100</td>
</tr>
</tbody>
</table>

The most type of delusion in schizophrenic patients of Javanese people is persecutoric (64%), and in Batak Toba people is persecutorik too (67%). Grandiosity more common in Batak Toba people by 23 people (23%). Delusion of controlled more common in Javanese people by 11 people (11%).

### Tabel 3. Difference of type of delusion in paranoid schizophrenic based on difference of ethnicity

<table>
<thead>
<tr>
<th>Suku</th>
<th>Jawa</th>
<th>Batak Toba</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Jenis waham</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persecurorik</td>
<td>64</td>
<td>64%</td>
<td>67</td>
</tr>
<tr>
<td>Kebesaran</td>
<td>14</td>
<td>14%</td>
<td>23</td>
</tr>
</tbody>
</table>

20
Analysis with chi square test found result that the significance level or P= 0.072 (P>0.050), this is means there is no significant difference in type of delusion of patients with paranoid schizophrenic in Javanese and Batak Toba people.

Discussion

There is no study about difference of the type of delusions in patients with paranoid schizophrenia between two ethnic group in Indonesia. Results of this study shows that no significant difference of type of delusions in patients with paranoid schizophrenia between two different ethnic group, in this case on Javanese and Batak Toba people. Previous studies in other countries shows there is difference in some type and content of delusion and hallucination between different cultural.3

The factors are considered to be influence about no significant difference in type of delusions in patients with paranoid schizophrenia in this study includes:
1. The Javanese people who live in Medan and Deli Serdang (Eastern Sumatera) and was taken as sample, their age not restricted and no limited the level of their generation.
2. The early settlement of worker from Java in Eastern Sumatera were separately from the other ethnic groups. In plantation not allowed a assimilation.7 Now, the condition has changed, the Javanese people in Medan and around has assimilated with others ethnic group. The limitation of relationship of intercultural in colonial era at the moment not seem anymore.

Conclusion

This study conclude that in a plural community and live in a assimilation of cultural the difference of the type of delusions in patients with paranoid schizophrenia has no significant difference.

Reference

among schizophrenics in Austria and in Pakistan. Psychopathology. 1999; 32: 225-34