Open Access Maced J Med Sci **electronic publication ahead of print,**
published on August 29, 2019 as https://doi.org/10.3889/oamjms.2019.401

ID Design Press, Skopje, Republic of Macedonia
Open Access Macedonian Journal of Medical Sciences.
https://doi.org/10.3889/oamjms.2019.401
eISSN: 1857-9655
Neuroscience, Neurology and Psychiatry

The Difference between Hospital Anxiety and Depression Scale – Anxiety Scores in Batak Male and Female with Schizophrenia: Preliminary Study

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Citation: Sipayung AVF, Loebis B, Husada MS, Nasution NM. The Difference between Hospital Anxiety and Depression Scale – Anxiety Scores in Batak Male and Female with Schizophrenia: Preliminary Study. Open Access Maced J Med Sci. https://doi.org/10.3889/oamjms.2019.401

Keywords: Schizophrenia; Anxiety; HADS; Batak

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Received: 11-Jun-2019; **Revised:** 13-Jul-2019; **Accepted:** 14-Jul-2019; **Online first:** 29-Aug-2019

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Funding: This research did not receive any financial support

Competing Interests: The authors have declared that no competing interests exist

Abstract

INTRODUCTION: Anxiety disorders can be comorbid with schizophrenia. There was 38.3% of subjects with schizophrenia spectrum disorders suffer from at least one anxiety disorder. In the general population, it was found that higher levels of anxiety were experienced by women than men.

AIM: To measure the difference between Hospital Anxiety and Depression Scale-Anxiety (HADS-A) scores in Batak male and female with schizophrenia.

MATERIAL AND METHODS: This preliminary study was a comparative analytical study with a cross-sectional approach involving twenty participants, divided into two groups, Batak male and female in the stabilisation phase who was outpatient in Prof. Dr M. Ildrem Mental Hospital Medan. Patient with schizophrenia was filled questionnaire of HADS-A to measure score of anxiety.

RESULTS: There was no statistically significant difference of HADS-A score from Batak male and female with schizophrenia with p-value 0.129.

CONCLUSION: From this preliminary study we found that there was no statistically significant of HADS-A scores in Batak male and female with schizophrenia maybe because of stabilisation phase whereas patients have got treatment, so the scores of anxieties have decreased.

Introduction

Schizophrenia is a chronic disease which is the most serious mental disorder. The risk of suffering for life reaches 1% of the population in the world [1]. The affective disorder often becomes comorbid with a schizophrenic patient [2].

A study identifies the importance of increasing emotional pressure, especially anxiety, as an important component in the presence of delusion. Anxiety and depression are important factors in the manifestation and persistence of thought disorder [2]. Several studies have found an increase in the level of symptoms and syndrome of anxiety in people with schizophrenia. The results show that 38.3% of subjects with schizophrenia spectrum disorders suffer from at least one anxiety disorder [3].

A study conducted by Naidu *et al.,* in South Africa were measured depression and anxiety using a Structured Clinical Interview for Positive and Negative Syndrome Scale (SCI-PANSS), the Calgary Depression Scale for Schizophrenia (CDSS) , The Hamilton Anxiety Rating Scale (HAM-A) and the Staden Schizophrenia Anxiety Rating Scale (S-SARS) in acute phase indicated that the higher of SCI-PANSS score, CDSS, HAM-A and S-SARS scores can be predicted to be statistically significantly higher [4].

According to the Anxiety Disorders Association of America (ADAA), there is large evidence from a survey conducted in the general

population which confirms that each anxiety disorder in DSM IV is more common in women than men. Women are at high risk of experiencing anxiety disorders, where developmental, social and reproductive factors are believed to contribute to this vulnerability [5].

However, the results of different studies were found by Allan *et al.,* in the UK to investigate the psychometric properties of HADS and the internal reliability of HADS which found that the sex of schizophrenic patients did not have a statistically significant effect on anxiety scores [2].

Based on this background and through literature review, there have been no studies examining anxiety in schizophrenic patients based on gender in the stabilisation phase of schizophrenia treatment, especially in North Sumatra and even in Indonesia. The research will also be directed at Batak tribe because the Batak tribe is one of the largest tribes in North Sumatra with high expressed emotion in their culture and ethnicity also can affect anxiety.

From this background, the researcher wanted to see whether there is a difference between Hospital Anxiety and Depression Scale – Anxiety (HADS-A) scores in Batak male and female with schizophrenia in stabilisation phase at Prof. dr. M. Ildrem Mental Hospital, Medan.

Material and Methods

This preliminary study was conducted in Prof. dr. M. Ildrem Mental Hospital, Medan, from January to April 2018. The patients who came to the outpatient clinic were selected based on inclusion criteria. Inclusion criteria included: male and female patients with a diagnosis of schizophrenia according to PPDGJ-III, 20-35 years of age, stabilisation phase of treatment, Bataknese, current treatment with antipsychotic Risperidone 2mg twice daily, unemployment, never married or divorced or widowed, not currently pregnancy and ability to give informed consent.

Patients were excluded if they have a family history of mental-emotional disorder, substance or alcohol use or dependence disorder (excluding nicotine and caffeine) and suffered from medical illness.

Total twenty patients, Batak male and female, have been selected and completed a questionnaire, Hospital Anxiety and Depression Scale-Anxiety (HADS-A) to measure the score of anxiety. Hospital Anxiety and Depression Scale (HADS), was constructed in 1983 by Zigmond and Snaith [6]. It consists of two separate subscales: anxiety (HADS-A) and depression (HADS-D) scale. Each of the subscales contains 7 statements about the current condition of the test person, and the results are counted and interpreted separately. Each item contains four points (0–3) with scores ranging from 0 to 21 for anxiety and 0 to 21 for depression. The anxiety scale measures the general anxiety, unfocused on a particular situation.[7] In Indonesia, Rudy M *et al.* had been tested for reliability test in Indonesian version. The results of the interrater agreement for HADS-A were 0.706. The result of the interrater agreement for HADS-D is 0.681. Where the value of 0.61-0.80 means that the Cohen Kappa agreement is good [8].

Statistical Analysis

This study is a comparative analytical study of two unpaired groups with a cross-sectional approach that is by describing and analysing a situation at a certain time using Hospital Anxiety and Depression Scale-Anxiety (HADS-A) instrument.

Results

The results of the demographic characteristics of the research study are shown in Table 1. The differences are statistically non-significant.

Table 1: Demographic Characteristic of Research Study

	Batak Male with Schizophrenia (mean ± s.d)	Batak Female with Schizophrenia (mean ± s.d)	p
Age (year)	31.80 ± 3.458	31.20 ± 3.011	0.684
PANSS Score	42.90 ± 6.773	42.50 ± 7.028	0.898

The differences in HADS-A score of Batak male and female with schizophrenia are shown in Table 2. The difference is statistically non-significant.

Table 2: The difference of HADS-A Score of Batak Male and Female with Schizophrenia

	Batak Male with Schizophrenia (mean ± s.d)	Batak Female with Schizophrenia (mean ± s.d)	p
HADS-A Score	5.30 ± 2.45	3.60 ± 2.32	0.129

Discussion

This study is still ongoing, and the results of the preliminary study are not yet represented the population of the subject. The subjects that we choose are in the stabilisation phase of schizophrenia treatment. They have taken antipsychotic drug, Risperidone 2mg twice daily more than the weeks and PANSS score is about ≤ 75. In this preliminary study, we have found there was no statistically significant of the difference of HADS-A score based on gender.

This study was different from a study which conducted by Naidu *et al.,* in South Africa, because it carried out in the acute phase of schizophrenia treatment that indicates there was an increase of SCI-PANSS score, CDSS, HAM-A and S-SARS scores.

To analysis, more variable is better than only to analysis HADS based on gender. That is the limitation of this study. If there is no statistically significant of HADS-A score until finishing this research, we can conclude that in the stabilisation phase of treatment, whereas the patient has got treatment, anxiety syndrome is not prominent anymore.

Moreover, anxiety disorder usually comorbid with schizophrenia; it must be a concern for us. By measuring anxiety score to the schizophrenic patient gradually, it can prevent the occurrence of more severe anxiety disorders and can overcome them earlier.

From this preliminary study, we found that there is no statistically significant HADS-A score from Batak male and female with schizophrenia.

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