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## Profile of Schizophrenia Aggressiveness with the Risk of Suicide based on the

## **Personality and Social Performance Score**

## Mochammad Choirul Waro<sup>1\*</sup>, Alifiati Fitrikasari<sup>1</sup>

<sup>1</sup>Department of Psychiatry, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia

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## \*Corresponding author:

Mochammad Choirul Waro

#### E-mail address:

<u>choirul.waro@gmail.com</u>

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#### ABSTRACT

Introduction: The risk of schizophrenia for suicide is 10%, of which 10% -15% of people with schizophrenia die of suicide at 20 years of follow-up. Aggressiveness is a factor to be watched out. Other factors are hallucinations, suicide, early-onset, history of schizophrenia, surveillance, age, gender, education, genetics, and the effect of depression. This study aimed to describe the sociodemographic profile, aggressiveness, and hallucinations of suicide in schizophrenic patients. Methods: The design of this study is descriptive research. The number of samples in this study was 49 schizophrenic patients at risk of suicide. The risk of aggressiveness is measured by the Personality and Social Performance Score. Results. Of the 49 patients, it was found that the proportion of male patients was 31 people (63.3%) and 18 women (36.7%). Aggressive behavior based on PSP score was divided into modest aggressiveness of 22 people (44.9%), severe 20 people (40.8%), and very severe in two people (4.1%). Suicidal hallucinations were also found in 11 patients (22.4%). Conclusion: There are markedly aggressive behavior and hallucinations of suicide in the majority of schizophrenic patients

#### 1. Introduction

Suicide is the most common cause of death among patients with psychotic disorders, which is primarily due to the tendency of clinicians to associate suicide with mood/affective disorders more than psychotic disorders.<sup>1</sup> Approximately 50% of all patients with schizophrenia attempt suicide at least once during their lifetime and 10% to 15% of schizophrenic patients successfully commit suicide during the 20year follow-up period.<sup>2</sup> Other data also suggest that schizophrenic patients have a suicide risk rate of about 10% of their lifetime, of which 60% - 80% are suicidal ideation and 30% - 55% attempt suicide.<sup>2,3</sup>

Both male and female schizophrenic patients are

more likely to attempt suicide. The main risk factors for suicide among people with schizophrenia are the presence of depressive symptoms, a young age-onset /early onset of psychotic disorders, and a high rate of premorbid function. The group may realize that the significant destruction of the disease is more severe than that of the other schizophrenic group and may see suicide as a reasonable alternative.<sup>4</sup>

Suicide usually accompanies a small number of psychotic episodes, which are usually associated with auditory hallucinations in the form of commanding suicide, as well as signs of aggressiveness and impulsivity that accompany the schizophrenic person. Also, auditory hallucinations in the form of orders to commit suicide and signs of aggressiveness/ impulsivity must be considered significant risk factors for attempted suicide.<sup>5,6</sup>

There are several other risk factors for individuals with schizophrenia for committing suicide attempts, which include: persistent psychotic disorders, psychotic disorders that often experience relapse, severe impairment of function, knowing the worsening effect of the illness (good view of the pain), overdependence on medication, perceptions of a failed future and loss of confidence in treatment. Schizophrenia in men under 30 years of age with prominent depressive symptoms and frequent relapses has a higher risk of having attempted suicide.<sup>6-8</sup>

The Personality and Social Performance test is a measuring tool used to measure a person's social function, where this tool is useful for obtaining necessary information about social and work performance as well as behaviors related to mental disorders.<sup>1</sup> The components in this test are the ability to self-care, useful social activities, personal and social relationships, and aggressive and disruptive behavior, where this aggressive behavior is expected in schizophrenic patients with suicidal ideas and attempts. This study aims to describe the behavior of aggressive and suicidal in schizophrenic patients.

#### 2. Methods

This research was conducted at the Amino Gondohutomo Regional Psychiatric Hospital in Semarang from November 2019 to March 2020. This research used a descriptive research design. The target population in this study was schizophrenic patients with suicide ideas and attempts. The inclusion criteria for this study sample were patients with a diagnosis of schizophrenia; there are suicide ideas and soldiers; aged 15 to 50 years. Meanwhile, the exclusion criteria were; the patient has comorbidities or other physical illnesses; patients withdrew at the time of the study. The selection of research subjects was carried out by purposive sampling method.

The patient is then asked to complete a

questionnaire in the form of sociodemographic data and a test using Personality and Social Performance (PSP) scoring. This PSP includes 16 measurable components which are assisted by 19 questions in the form of a structured interview. A simple calculation of the total score is to match the degrees of each domain by finding the score in the form of a 10-point interval such as the GAF score and then determining the final score between the 10-point intervals. This study has received ethical approval from the Medical Research Unit Committee, Faculty of Medicine, Universitas Diponegoro, Semarang, Indonesia (No. 288 / MRU / UNDIP / 2019).

## 3. Results

This study was conducted on schizophrenic patients with a risk of suicide at the Amino Gondohutomo Regional Psychiatric Hospital Semarang, Indonesia, and 49 patients met the inclusion criteria. The mean age of the research subjects was 27.98 + 10.62, with the youngest being 15 years old and the oldest being 50 years old. A complete description of the demographic and characteristics of patients, including age, gender, education. early onset psychosis, of and hallucinations, were obtained. Also depicted is the mean total PSP scale and the level of aggressiveness of schizophrenic patients as measured by the PSP scale. Most of the respondents diagnosed with schizophrenia at risk of suicide were men (31 / 63.3%). Based on the education level, almost half are in junior high school (24 patients), and only one patient has graduated from college. Based on the age when suffering from schizophrenia with the idea and attempted suicide, most of them were during adolescence and early adulthood, which is less than 30 years as many as 33 patients.

On the PSP scale measurement, the mean PSP of schizophrenic patients with ideas and suicide attempts was 29.35 + 7.339, with the lowest PSP scale being 20 and the enormous PSP scale being 45. In the domain of disruptive and aggressive behavior on the PSP scale, it was found that most patients had real and severe levels of aggressiveness, namely 22 and 20 patients, and only two patients had very severe levels of aggressiveness. The first onset of schizophrenia occurred when they were more than 17 years old, which was 37 patients, and only 12 patients were less than 17 years old when they first had schizophrenia.

Hallucinations telling the patient to commit suicide were only found in 11 patients, and 38 patients did not have hallucinations telling suicide.

In the past history of schizophrenia, it was found that 18 patients had schizophrenia three times or more, and 31 patients had schizophrenia less than three times. At the surveillance level, it was found that 40 patients had a disturbing surveillance level (surveillance 1). Diagnosis for schizophrenia patients suicidal ideation and with attempts was predominantly in the paranoid schizophrenia group, namely 24 patients, then in the unspecified schizophrenia group (12 patients) and catatonic schizophrenia (11 patients), and only two patients with a diagnosis of hebephrenic schizophrenia. In the way patients attempted suicide, most of them were only in the form of verbal ideas, namely 15 patients, whereas for those who had attempted suicide, the most used method was to try to cut/slice their arm and tie the neck (hang himself) and stab stomach.

#### 4. Discussion

A study conducted by the NCHS reported that the highest death rate in schizophrenia was caused by suicide.<sup>2</sup> In the United States, an estimated 4000 schizophrenic patients commit suicide each year. The age of onset of schizophrenia to commit suicide is usually in adolescence, or early adulthood, and most schizophrenic patients who commit suicide do so during the first years of illness; thus schizophrenic patients who commit suicide tend to be relatively young.<sup>2,9</sup>

Based on the results of the study, it was found that the majority of patients who had ideas and attempted suicide were male (more than 50%). This fact is consistent with research conducted by McGirr et al., in the general population, where the suicide rate is more common in males than females.<sup>9</sup> A man with schizophrenia is also a risk factor to be aware of for the occurrence of suicide attempts and ideas. Of male schizophrenics who had an idea and attempted suicide 75% were single.

Most of the patients who had the idea and attempted suicide were in their teens and early adulthood (less than 30 years). This is the main risk for the occurrence of suicidal ideation and attempted suicide in schizophrenia during adolescence and early adulthood, because at that time they have many strong desires and expectations, but not under the reality experienced. Besides, at that age, they have unstable personalities and are also supported by low abilities.<sup>10,11</sup>

Based on the level of disturbing and aggressive behavior with the PSP scale measurement, it was found that most of them had real and severe levels of disturbing and aggressive behavior. This is under the theory that states that most schizophrenics with suicidal ideas and attempts are influenced by the level of aggressive and impulsive behavior.<sup>8</sup>

Most of the research subjects were junior high school graduates, and only one patient had graduated from college. The existing theory states that many suicide attempts occur in people with a high level of education and high social status, but a decrease in social status in a person will also increase the risk of suicide.<sup>6</sup> In this study, most of them had a low level of education due to the limitations of this study, where the study was conducted in class III wards and used government insurance, whose patients had low economic and educational levels.

When first suffering from schizophrenia in this study, only 12 patients had schizophrenia before 17 years of age. This happens because schizophrenia has a low frequency of occurring at the age of fewer than 17 years. Only a small proportion of schizophrenic patients with suicidal ideas and attempts are influenced by hallucinations that tell them to commit suicide. This is following the results of the study, which stated that only 11 patients had hallucinations that ordered suicide, and the rest had no suicide command hallucinations.

A history of having three or more schizophrenia treatments at the age of 20 is also a risk factor for a person with schizophrenia to have an idea and attempt suicide. This happens because patients who have been treated three times or more when they are 20 years old will interfere with the person's ability to be able to return to adaptation socially, role, and sexually outside of hospital care. The results of this study indicated that 18 patients had undergone hospital treatment more than three times.<sup>2,4</sup> The results of this study showed that more than two-thirds of the patients had degree 1 (disturbed). This result is different from the theory which states that people with schizophrenia who have ideas and commit suicide attempts mostly have a fair degree of insight, so that they are aware of their illness and the failures they experience, resulting in a sense of hopelessness, which eventually leads to the idea of suicide.11

### 5. Conclusion

There are markedly aggressive behavior and hallucinations of suicide in the majority of schizophrenic patients.

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