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### Prevalence Of Schizophrenia Incident Rates Based On Age And Gender In RSKD Dadi South Sulawesi Province In 2022

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Article Info	ABSTRACT			
Keywords:	Schizophrenia is a serious mental disorder that affects individuals			
Schizophrenia,	globally, causing significant cognitive, emotional, and behavioral			
Age,	dysfunction. Although the prevalence of schizophrenia has been widely			
Gender	studied, understanding the distribution of the incidence of this disease			
	based on age and gender still requires further research. To determine			
	the prevalence of schizophrenia incidence rates based on age and			
	gender in RSKD Dadi, South Sulawesi Province in January-December			
	2022. This research is a descriptive analytical study with a			
	retrospective study method with the aim of knowing the prevalence of			
	schizophrenia incidence rates based on age and gender in RSKD Dadi,			
	South Sulawesi Province in 2022. The highest percentage of			
	Schizophrenia cases in RSKD Dadi, South Sulawesi Province who were			
	hospitalized in January-December in 2022 based on age, the highest			
	was >50 years old, namely 818 cases (76.4%), based on type gender, namely men as many as 835 (78.0%).			
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### INTRODUCTION

Mental disorders are illnesses caused by confusion in thoughts, perceptions and behavior where individuals are unable to adapt to themselves, other people, society and the environment. Mental disorders are divided into two, namely severe mental disorders and mild mental disorders. One of the serious mental disorders is schizophrenia. Schizophrenia is the most common mental disorder in Indonesia. Schizophrenia is a persistent and serious brain disease that results in psychotic behavior, concrete thinking and difficulties in processing information, interpersonal relationships and solving problems.

Symptoms of schizophrenia usually appear in late adolescence or young adulthood. Onset in men is usually between 15-25 years and in women between 25-35 years. The prognosis is usually worse in men when compared to women. <sup>2</sup> The incidence of schizophrenia is closely related to the presence of stressors, both biological, psychological and social stressors. Biological stressors include the presence of certain diseases of the brain, physical disorders, disabilities, and so on. Psychological stressors can occur more because of things related to a person's emotional situation. One of them is the age factor, where young age and old age will greatly influence the incidence of schizophrenia. And



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there may be some sources that say that young age will have higher risk factors compared to old age because there are many stressors that arise in the teenage and adult phases, but it is not impossible that old age is also at risk due to the accumulation of social problems in the past so that it will influence in old age.<sup>3</sup>

Indonesia as a country with a large population can have a high prevalence of schizophrenia. However, it is very unfortunate that Indonesia does not have data on the prevalence of schizophrenia, therefore it is necessary to conduct a comprehensive study of schizophrenia so that schizophrenia prevention can be carried out properly. Therefore, based on the description above, researchers are interested in examining the prevalence of schizophrenia which can be influenced by several factors, and then there are several things that the true facts cannot yet be known, one of which is age and gender.

### **METHOD**

This research is a descriptive analytical research with a *retrospective study method*. The aim is to determine the prevalence of schizophrenia incidence rates based on age and gender in RSKD Dadi, South Sulawesi Province in 2022. This research was conducted at RSKD Dadi, South Sulawesi Province, with the research conducted in May 2024. The population of this study was all inpatients. who was diagnosed with schizophrenia at RSKD Dadi, South Sulawesi Province in 2022.

This research was carried out by looking at summary data obtained from the medical records of patients treated at RSKD Dadi, South Sulawesi Province who were diagnosed with schizophrenia in January-December 2022 in the form of Microsoft Excel format using a *total sampling technique* where the total sample size was obtained. Those who met the criteria were 1070 cases. The recapitulation data that has been collected is then analyzed using the Microsoft Excel program which is presented in the form of frequencies and percentages. This research was approved by the Research Ethics Committee of the Faculty of Medicine, Indonesian Muslim University.

### **RESULTS**

Research regarding the prevalence of schizophrenia incidence rates based on age at RSKD Dadi, South Sulawesi Province in 2022. It was carried out for 1 week starting in May 2024. The samples in this study were all summary data obtained from the medical records of patients treated at the hospital. RSKD Dadi, South Sulawesi Province with a diagnosis of schizophrenia in January-December 2022. Based on tertiary data obtained from medical records at RSKD Dadi, South Sulawesi Province, after processing the data using Microsoft Excel, 1070 samples were obtained that met the criteria.

**Table 1** Frequency distribution and presentation of schizophrenia at RSKD Dadi, South Sulawesi Province in 2022 based on age.

Schizophrenia		n	%
Age	<10 years	0	0
	11-20 years old	6	0.6



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Schizophrenia	n	%
21-30 years old	63	5.9
31-40 years old	94	8.8
41-50 years old	89	8.3
>50 years	818	76.4
Amount	1070	100.0

The percentage of schizophrenic sufferers who were hospitalized at RSKD Dadi, South Sulawesi Province based on age was mostly found in the age group >50 years, namely 818 people (76.4%), the second highest was found in the 31-40 year age group, namely 94 people (8.8%), then the age group 41-50 years, namely 89 people (8.3%), the age group 21-30 years 63 people (5.9%), the age group 11-20 years, namely 6 people (0.6%).

**Table 2** Frequency distribution and presentation of schizophrenia at RSKD Dadi, South Sulawesi Province in 2022 based on gender.

Schizophrenia		n	%
Gender	Man	835	78.0
	Woman	235	22.0
Amount		1070	100.0

The percentage of schizophrenic sufferers in RSKD Dadi, South Sulawesi Province who are hospitalized based on gender is mostly found in men, namely 835 people (78.0%) while in women it will only be 235 people (22.0%) in 2022.

### Discussion

The percentage of cases of schizophrenia based on age obtained according to table 1 shows that the prevalence rate of schizophrenia in RSKD Dadi, South Sulawesi Province in 2022 is found more in the age group > 50 years, namely 818 people (76.4%) the second highest is found in the 31-40 year age group is 94 people (8.8%), then the 41-50 year age group is 89 people (8.3%), the 21-30 year age group is 63 people (5.9%), age group 11-20 years, namely 6 people (0.6%).

This is not in line with the results of research by (Indah et al. 2022) which shows that the highest percentage of schizophrenia patients at RSJ Sungai Bangkong Pontianak based on age is mostly found in the productive age group, namely 25-40 years, namely 82.0%. 20 This is also in accordance with the results of research (Anas et al. 2023) conducted in the working area of Malangke Community Health Center, North Luwu. Based on age, it was found that schizophrenia was more common at ages <45 years, which is the productive age, namely 67.5%. <sup>21</sup> Young people are at high risk of developing schizophrenia because at this stage life is filled with stressors, whereas in old age it is more influenced by biological factors. Apart from that, increasing age can affect dopamine levels in the brain due to the aging process in the brain which can cause schizophrenia. The results of this study show differences with the results of studies that have been conducted previously because this study did not use primary or secondary data so that the researchers did not know when the first episode of schizophrenia occurred in each sample, besides that in this study the



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diagnosis of schizophrenia was not known whether It is included in organic or functional schizophrenia because changes have been made to DSM-IV by removing organic disorders from psychiatric nosology. The percentage of schizophrenia cases based on gender obtained according to table 2 shows that the prevalence of schizophrenia cases in RSKD Dadi, South Sulawesi Province in 2022 is that gender is more common in men, namely 835 people (78.0%) while in women only as many as 235 people (22.0%).

This is in accordance with the results of research by (Indah et al. 2022) which shows that the highest percentage of schizophrenia patients at RSJ Sungai Bangkong Pontianak based on gender is male, namely 55.7% while female is 44.3%. <sup>20</sup> The results of this research are also in line with the results of research by (Handayani et al. 2016) at RSJ Grhasia Special Region of Yogyakarta based on gender - men tend to be more numerous than women with a percentage of 53.2% men and 46.8% women. Basically, men tend to have more difficulty controlling their emotions, in contrast to women. This can be caused because women have high levels of the hormone estrogen, where high levels of estrogen in dopamine receptors can help slow dopamine transmission, which if excessive can cause psychotic symptoms. The hormone estrogen also regulates the activity of specific cytochrome P450 (CYP) enzymes that metabolize drugs, thereby potentially increasing levels of at least some antipsychotic drugs in women.<sup>22</sup>

#### **CONCLUSIONS**

The prevalence of schizophrenic patients based on age is highest in those aged >50 years, and based on gender the highest number is found in men. For future researchers, further research is needed regarding the description of the characteristics of schizophrenia patients with other risk factors and can further expand the research location so that the description of the characteristics can be generalized and for future researchers so that data collection can be carried out using primary or secondary data so that they can carry out in-depth analysis regarding characteristic picture.

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