CHAPTER I
INTRODUCTION

1. Background of the Problem

Schizophrenia and schizoaffective disorder are severe mental disorders that profoundly impact individuals, families, and society. Schizophrenia is characterized by psychotic symptoms such as delusions, hallucinations, and disorganized thinking and behavior. In contrast, schizoaffective disorder combines symptoms of schizophrenia with mood disturbances, such as depression or mania. These disorders have multifactorial etiologies involving biological, psychological, and social determinants, as explained in the Biopsychosocial Theory (Engel, 1977) and the Stress-Diathesis Model (Zubin & Spring, 1977).

According to the American Psychiatric Association (APA, 2013), schizophrenia affects an individual's thoughts, emotions, and behavior, often disrupting daily life. Meanwhile, the World Health Organization (WHO, 2019) defines schizoaffective disorder as a complex condition exhibiting both psychotic and mood-related symptoms, making its diagnosis and treatment more challenging.

Globally, the prevalence of schizophrenia and schizoaffective disorder varies across regions, influenced by genetic predisposition, environmental factors, and healthcare accessibility. The WHO (2022) estimates that schizophrenia affects approximately 24 million people worldwide, or about 1 in 300 individuals. Although schizoaffective disorder is less common, it significantly impacts patients' quality of life. In Indonesia, data from the 2018 Basic Health Research (Riskesdas) indicate that 7 per 1,000 households have a family member with a severe mental disorder, including schizophrenia.

Dadi Hospital Makassar, as a major psychiatric referral center in Eastern Indonesia, plays a critical role in treating individuals with severe mental disorders. However, there is limited research on the prevalence and demographic characteristics of schizophrenia and schizoaffective disorder in this hospital.

e patterns through a descriptive epidemiological and essential to assess case distribution, demographic trends, risk t patterns. This research aims to provide valuable insights that veloping more effective management strategies and targeted iduals affected by these disorders.

B. Problem Formulation

What is the prevalence and distribution pattern of schizophrenia and schizoaffective disorder, along with the associated demographic characteristics, among patients treated at Dadi Hospital Makassar from 2023 to 2024?

C. Research Purpose

1. General Purpose

This study aims to provide a comprehensive epidemiological and demographic analysis of schizophrenia and schizoaffective disorder at Dadi Hospital Makassar (2023–2024) to enhance understanding of their prevalence, distribution, and associated factors. The findings are expected to contribute to improving mental health services, early diagnosis, and targeted interventions in Indonesia.

2. Specific Purpose

This research specifically aims to:

1. Determine the prevalence of schizophrenia and schizoaffective disorder among patients at Dadi Hospital Makassar from 2023 to 2024.
2. Analyse demographic characteristics of affected patients, including age, gender, socioeconomic status, marital status, and educational background.

D. Benefits of Research

1. Clinical Benefits

- Enhancing early diagnosis and intervention by identifying high-risk demographic groups.
- Improving treatment planning based on epidemiological patterns and patient characteristics.

esource allocation at Dadi Hospital Makassar for better are services.

2. Academic Benefits

- Providing region-specific epidemiological data on schizophrenia and schizoaffective disorder, addressing a critical research gap in Indonesia.
- Serving as a reference for future studies exploring mental health trends in South Sulawesi and beyond.
- Facilitating comparative studies by offering insights that can be benchmarked against national and international data.

CHAPTER II
LITERATURE REVIEW

1. Definition and Classification of Schizophrenia Disorder

Schizophrenia

Definition

Schizophrenia is a chronic and severe mental disorder characterized by profound disruptions in thought processes, perceptions, emotions, and behavior. According to the ICD-10 classification system (World Health Organization, 2019), schizophrenia is categorized under code F20 and is defined by the presence of characteristic symptoms such as hallucinations, delusions, disorganized thinking, and negative symptoms.

Etiology

The etiology of schizophrenia is multifactorial, involving genetic, neurobiological, and environmental factors:

- Genetic Factors: A family history of schizophrenia increases the risk, with heritability estimates of around 80%.
- Neurobiological Factors: Dysregulation of neurotransmitters, particularly dopamine and glutamate, plays a significant role. Structural brain abnormalities, such as enlarged ventricles, have also been observed.
- Environmental Factors: Prenatal exposure to infections, malnutrition, or stress, as well as childhood trauma, substance abuse, and urban upbringing, may contribute to the development of schizophrenia.

Clinical Manifestations:

- Positive Symptoms: Hallucinations (e.g., auditory hallucinations), delusions (e.g., paranoid delusions), disorganized speech, and grossly disorganized or catatonic behavior.
- Symptoms: Blunted affect, alogia (poverty of speech), avolition motivation), anhedonia (inability to experience pleasure), and drawal.
- Symptoms: Impaired executive functioning, memory, and

Phases of Schizophrenia:

1. Prodromal Phase: Characterized by subtle changes in behavior, mood, and cognition, such as social withdrawal, irritability, and mild cognitive deficits.
2. Acute Phase: Marked by the onset of severe psychotic symptoms, such as hallucinations and delusions.
3. Residual Phase: Symptoms diminish, but negative symptoms and cognitive impairments may persist.

Diagnostic Criteria (ICD-10):

For a diagnosis of schizophrenia, the following criteria must be met (World Health Organization, 2019):

1. Presence of at least one of the following:

- Hallucinations (e.g., auditory hallucinations).
- Delusions (e.g., paranoid delusions).
- Disorganized speech (e.g., incoherence or tangentiality).
- Grossly disorganized or catatonic behavior.
- Negative symptoms (e.g., blunted affect, alogia).

2. Symptoms must persist for at least one month, with significant social or occupational dysfunction observed over a six-month period.
3. Exclusion of other psychiatric or medical conditions that could explain the symptoms.

Types and Subtypes (ICD-10):

- F20.0 Paranoid Schizophrenia: Dominated by delusions and hallucinations, with relatively preserved cognitive and affective functioning.

ebephrenic Schizophrenia: Characterized by disorganized
ıd behavior, along with flat or inappropriate affect.
ıtatonic Schizophrenia: Marked by prominent psychomotor
:es, such as stupor, rigidity, or excessive motor activity.

- F20.3 Undifferentiated Schizophrenia: Symptoms do not clearly fit into any of the above subtypes.
- F20.5 Residual Schizophrenia: Chronic phase with predominant negative symptoms and a history of past psychotic episodes.
- F20.6 Simple Schizophrenia: Insidious onset of negative symptoms without a history of psychotic episodes.

Supporting Investigations:

1. Physical Examinations:
   Body Mass Index (BMI) measurement, waist circumference measurement, and blood pressure measurement.
2. Laboratory Examinations:
   Peripheral blood tests, liver and kidney function tests, lipid profile tests, and random blood glucose tests to exclude metabolic or infectious causes of psychosis.
3. PANSS (Positive and Negative Syndrome Scale):
   PANSS is an instrument used to evaluate patients with aggressive behavior. The results can be used to determine the appropriate therapeutic approach for patients (Ministry of Health of the Republic of Indonesia, 2015).

Management:

Pharmacotherapy:

- First-Generation Antipsychotics (FGAs): Effective for positive symptoms but associated with extrapyramidal side effects.
- Second-Generation Antipsychotics (SGAs): Preferred due to lower risk of extrapyramidal symptoms and efficacy for both positive and negative symptoms (e.g., risperidone, olanzapine).

Behavioral Therapy (CBT): Helps patients challenge delusional
d develop coping strategies.
ıerapy: Educates families about the disorder and improves
cation and support systems.

Psychosocial Interventions:

- Vocational Training: Enhances employment opportunities and financial independence.
- Social Skills Training: Improves interpersonal relationships and community integration.
- Supported Employment: Provides job placement and ongoing support for patients in the workforce.

Hospitalization:

- Indicated during acute psychotic episodes to ensure patient safety and stabilize symptoms.
- Involves close monitoring, medication adjustment, and crisis intervention.

Prevention:

- Early intervention during the prodromal phase may delay or prevent the onset of full-blown psychosis.
- Public health initiatives to reduce substance abuse and improve prenatal care.

Prognosis:

- Variable, with approximately 20% of patients achieving full recovery.
- Poor prognostic factors include male gender, early onset, severe negative symptoms, and poor adherence to treatment.

2. Definition and Classification of Schizoaffective Disorder

Schizoaffective Disorder

Definition

Schizoaffective disorder is a mental health condition that combines features of schizophrenia with significant mood disturbances, such as depressive or manic episodes. In the ICD-10 classification system, schizoaffective disorder is code F25 (World Health Organization, 2019).

gy of schizoaffective disorder is multifactorial, involving genetic, ogical, and environmental factors:

- Genetic Factors: Family history of schizophrenia or mood disorders increases susceptibility.
- Neurobiological Factors: Dysregulation of dopamine, serotonin, and glutamate systems.
- Environmental Factors: Stressful life events, trauma, and substance abuse may trigger the onset.

Clinical Manifestations:

- Psychotic Symptoms: Hallucinations, delusions, and disorganized thinking.
- Mood Symptoms: Depressive episodes (e.g., sadness, hopelessness) or manic episodes (e.g., elevated mood, grandiosity).
- Cognitive Symptoms: Impaired attention, memory, and executive functioning.

Phases of Schizoaffective Disorder:

1. Prodromal Phase: Subtle changes in mood and behavior, such as irritability or social withdrawal.
2. Acute Phase: Severe psychotic and mood symptoms, requiring intensive treatment.
3. Residual Phase: Symptoms subside, but mild mood disturbances and cognitive impairments may persist.

Diagnostic Criteria (ICD-10):

For a diagnosis of schizoaffective disorder, the following criteria must be met (World Health Organization, 2019):

1. Presence of psychotic symptoms (e.g., hallucinations, delusions) consistent with schizophrenia.
2. ıt mood disturbances (e.g., depressive or manic episodes) that ıent and persistent.
3. s must not be attributable to substance use or another medical

Types and Subtypes (ICD-10):

- F25.0 Schizoaffective Disorder, Manic Type: Characterized by manic episodes occurring alongside psychotic symptoms.
- F25.1 Schizoaffective Disorder, Depressive Type: Characterized by depressive episodes occurring alongside psychotic symptoms.
- F25.2 Schizoaffective Disorder, Mixed Type: Features of both manic and depressive episodes with psychotic symptoms.

Supporting Investigations:

- Psychiatric Evaluation: Detailed clinical interview and mental status examination.
- Mood Assessment: Tools such as the Hamilton Depression Rating Scale (HDRS) or Young Mania Rating Scale (YMRS).
- Neuroimaging and Laboratory Tests: To rule out organic causes of psychosis or mood disturbances.

Management:

- Pharmacotherapy: Combination of antipsychotics (e.g., quetiapine) and mood stabilizers (e.g., lithium) or antidepressants (e.g., SSRIs).
- Psychotherapy: CBT and psychoeducation to address mood and psychotic symptoms.
- Psychosocial Interventions: Supportive therapy, vocational rehabilitation, and family education.
- Hospitalization: Required during severe mood episodes or psychotic exacerbations.

Prevention:

tification and treatment of mood and psychotic symptoms.
exposure to stress and substance abuse.

Prognosis:

- Better prognosis than schizophrenia but worse than mood disorders alone.
- Factors influencing prognosis include adherence to treatment, severity of symptoms, and social support.

1. Global and Regional Epidemiology

Schizophrenia and schizoaffective disorder are significant contributors to the global burden of mental health disorders. The global prevalence of schizophrenia is estimated to be 0.3%–0.7%, while schizoaffective disorder affects approximately 0.3%–0.5% of the population (World Health Organization, 2019). These disorders are associated with substantial disability and reduced quality of life, particularly in low- and middle-income countries (LMICs). Epidemiological studies reveal variations in prevalence influenced by genetic predisposition, environmental factors, and socioeconomic conditions. For instance, urban environments, social isolation, and substance abuse have been linked to higher rates of schizophrenia.

In Southeast Asia, schizophrenia research remains limited, with the region contributing only 1.09% of global schizophrenia research output (Uy & Tantengco, 2022). A bibliometric analysis of schizophrenia studies in Southeast Asia from 1973 to 2021 identified 1,068 articles, with Singapore (41%), Malaysia (29%), and Thailand (22%) leading in research productivity. In contrast, Indonesia accounted for only 14.6% of publications, despite its high schizophrenia burden. This underrepresentation highlights the need for more region-specific studies to address gaps in understanding and managing schizophrenia and schizoaffective disorder.

sia, the prevalence of schizophrenia is estimated to be 0.5%–higher rates observed in lower-income and rural populations of Health Indonesia, 2020). A 2019 study in South Jakarta a prevalence of 0.7 per 1,000 residents, with significant across districts (Winarti & Hatma, 2019). Key findings included:

- 56% of patients did not adhere to regular treatment, highlighting challenges in treatment continuity.
- Limited access to mental health services in rural areas exacerbated the burden of schizophrenia.

Despite these insights, epidemiological data on schizoaffective disorder remain scarce, reflecting a critical gap in understanding this condition. This gap limits the development of targeted interventions for individuals with schizoaffective disorder, who often require integrated care for both psychotic and mood symptoms

2. Schizophrenia and Schizoaffective Disorder in Indonesia

Indonesia faces significant challenges in addressing mental health disorders, including limited access to psychiatric services, pervasive stigma, and low mental health literacy. Despite efforts by the Indonesian government to improve mental health care through the National Health Insurance (BPJS), barriers such as geographical disparities, inadequate funding, and insufficient mental health professionals persist. These challenges are particularly pronounced in rural areas, where access to specialized care is often limited.

A 2022 study conducted at Dadi Hospital Makassar highlighted the high hospitalization and readmission rates among schizophrenia patients, emphasizing the chronic and recurrent nature of the disorder. The study also revealed gaps in early detection, treatment adherence, and social reintegration, which are critical for improving patient outcomes. However, research on schizoaffective disorder in Indonesia remains scarce, with no significant studies focusing on its prevalence, clinical characteristics, or treatment outcomes. This gap in knowledge limits the ability to develop

nterventions for individuals with schizoaffective disorder, who ire integrated care for both psychotic and mood symptoms.

cent study by Qurniawati et al. (2024) at Dadi Hospital Makassar he demographic and clinical characteristics of 91 schizophrenia

inpatients. The study found that 84% of patients were male, with the 36-45 age group (38%) being the most affected. Additionally, 64% of patients were unemployed, and 89% relied on BPJS for healthcare coverage. Despite these insights, the study did not address schizoaffective disorder, leaving a critical gap in understanding this condition within the Indonesian population.

The lack of epidemiological data on schizoaffective disorder, coupled with the high burden of schizophrenia, highlights the urgent need for region-specific studies to inform mental health policies and improve service delivery. Addressing these gaps will require a multifaceted approach, including increased funding for mental health research, public awareness campaigns to reduce stigma, and the integration of mental health services into primary care.

3. Previous Studies at Dadi Hospital Makassar

Several studies have been conducted at Dadi Hospital in Makassar to explore the characteristics of schizophrenia patients. A 2022 study titled *"Karakteristik Pasien Skizofrenia Rawat Jalan di Rumah Sakit Khusus Daerah Dadi Makassar Tahun 2022"* examined outpatient schizophrenia patients, focusing on their demographic and clinical profiles. The study highlighted key factors such as age distribution, gender differences, and medication adherence patterns. However, this research had several limitations: it excluded patients with schizoaffective disorder, lacked updated data for the 2023–2024 period, and did not thoroughly investigate social determinants, economic status, or comorbidities. These factors are critical for understanding treatment outcomes and developing comprehensive care strategies.

ntly, a 2024 study by Qurniawati et al., titled "Profile of Inpatient enia Patients at Dadi Makassar Regional Special Hospital", he demographic and clinical characteristics of 91 schizophrenia using retrospective data. Published in Jurnal Eduhealth (Vol.

15, No. 02), this study employed a descriptive retrospective design and utilized secondary medical records for analysis. The findings provided valuable insights into the inpatient population, including age, gender, and clinical presentation. However, similar to the 2022 study, this research did not address schizoaffective disorder or explore the social and cultural factors influencing patient outcomes. Additionally, the study was limited to inpatient data, leaving a gap in understanding the broader outpatient population and their unique challenges.

Another significant study, conducted by Ilham et al. (2024) and titled "Prevalence of Schizophrenia Incident Rates Based on Age and Gender in RSKD Dadi, South Sulawesi Province in 2022", analyzed 1,070 inpatient medical records to determine schizophrenia prevalence by age and gender. The study found that patients over 50 years old had the highest prevalence (76.4%), while males were significantly more affected (78% male vs. 22% female). These findings align with prior studies indicating a higher schizophrenia prevalence in men, likely due to hormonal, genetic, and environmental factors. Additionally, the data suggest a need for earlier intervention strategies, as late-onset schizophrenia was highly prevalent. However, this study also focused exclusively on schizophrenia, leaving schizoaffective disorder unexamined. This further emphasizes the necessity of your current research to fill this knowledge gap and provide a more comprehensive understanding of psychotic disorders.

Furthermore, a 2024 study by Dwiyanti et al., titled "Description of Cognitive Function in Schizophrenia Patients in the Dadi Regional Special Hospital, South Sulawesi Province", analyzed 113 schizophrenia [illegible] to assess their cognitive function using the Montreal Cognitive [illegible]nt (MoCA) test. The study found that 73% of schizophrenia [illegible]xperienced cognitive impairment, with a higher prevalence [illegible]ales (53%) and those with lower education levels. Moreover, [illegible]employed patients showed cognitive decline, underscoring the

socioeconomic burden of the disorder. While this study provides crucial insights into cognitive impairment in schizophrenia, it does not address schizoaffective disorder or explore how cognitive decline impacts long-term treatment outcomes. This highlights another area where your current research can contribute by examining the cognitive and functional trajectories of patients with schizoaffective disorder.

4. Research Gaps and Study Significance

- **Identified Research Gaps**

1. Lack of Recent Data: There is a notable absence of comprehensive epidemiological studies on schizophrenia and schizoaffective disorder at Dadi Hospital for the 2023–2024 period. This gap limits the ability to understand current trends and challenges in patient care.
2. Underrepresentation of Schizoaffective Disorder: Existing research, including the 2022 and 2024 studies, has predominantly focused on schizophrenia, leaving schizoaffective disorder understudied in the Indonesian context.
3. Geographical Disparities: Most studies on mental health in Indonesia have concentrated on Jakarta and Java, with limited attention given to South Sulawesi. This creates a gap in region-specific data that could inform localized mental health interventions.
4. Incomplete Demographic Analysis: While the 2024 study by Qurniawati et al. provided insights into inpatient demographics, there is insufficient research examining the relationship between socioeconomic status, educational background, and treatment adherence.
5. Neglect of Social and Cultural Factors: Few studies have explored the role of stigma, family support, and traditional beliefs in shaping mental health outcomes, particularly in South Sulawesi.

ficance of This Study

Epidemiological Data: This study will provide current prevalence schizophrenia and schizoaffective disorder at Dadi Hospital , covering the 2023–2024 period. This data is essential for ding the evolving burden of these conditions.

2. Improved Psychiatric Services: By identifying key demographic and clinical trends, the findings will help enhance diagnostic accuracy and treatment strategies for mental health professionals at Dadi Hospital.
3. Addressing Geographical Disparities: This research will contribute to filling the gap in mental health data for South Sulawesi, supporting the development of region-specific mental health programs.
4. Policy Development: The study's outcomes can inform the Indonesian Ministry of Health in designing evidence-based policies and allocating resources more effectively to improve psychiatric care nationwide.
5. Reducing Stigma and Raising Awareness: By shedding light on the social and cultural factors influencing mental health, this research can support public education campaigns and advocacy efforts to reduce stigma and promote mental health awareness.

CHAPTER III
THEORETICAL FRAMEWORK AND CONCEPTUAL FRAMEWORK

A. Theoretical Framework

The study on the prevalence of schizophrenia and schizoaffective disorder patients at Dadi Hospital Makassar is grounded in multiple theoretical perspectives that explain the etiology, manifestation, and epidemiological factors influencing these disorders. The following theories provide a comprehensive understanding of the study:

1. Biopsychosocial Model of Mental Health

The Biopsychosocial Model asserts that mental disorders, including schizophrenia and schizoaffective disorder, result from the interplay of biological, psychological, and social factors:

- Biological Factors: Genetic predisposition, neurotransmitter imbalances (dopamine hypothesis), and brain structure abnormalities.
- Psychological Factors: Trauma, chronic stress, cognitive dysfunction, and emotional dysregulation.
- Social Factors: Family support, stigma, socioeconomic status, and access to healthcare services.

This model is crucial for understanding the prevalence of schizophrenia and schizoaffective disorder as it incorporates multiple influencing factors.

2. Dopamine Hypothesis of Schizophrenia (Carlsson & Lindqvist, 1963)

Cultural psychiatry emphasizes the role of cultural context in shaping mental health experiences and treatment responses. According to this theory, cultural beliefs and values significantly affect how mental illnesses are perceived, diagnosed, and treated (Kirmayer & Swartz, 2013). In regions like South Sulawesi, where supernatural interpretations of mental illness are common, this perspective is critical for developing culturally adapted interventions that respect local beliefs while promoting effective treatment.

Model (Zubin & Spring, 1977)

eory focuses on the relational dynamics and emotional burdens regivers. Given the high levels of stigma and limited resources, viduals with schizophrenia often face intense emotional and ocial support theory highlights the importance of community

resources, familial ties, and professional support in reducing caregiver burden and enhancing patient outcomes (Pearlin et al., 1990). This framework will guide the study's exploration of how cultural expectations affect caregiver roles and well-being in South Sulawesi.

4. **Epidemiological Transition Model (Omran, 1971)**

This model describes how disease prevalence shifts over time due to demographic, social, and economic changes.

- Mental health disorders are increasingly recognized as public health concerns in developing countries like Indonesia.
- This theory is useful for analyzing trends in schizophrenia and schizoaffective disorder prevalence at Dadi Hospital Makassar.

B. Conceptual Framework

The conceptual framework visually represents the relationship between various factors influencing the prevalence of schizophrenia and schizoaffective disorder at Dadi Hospital Makassar.

Key Variables

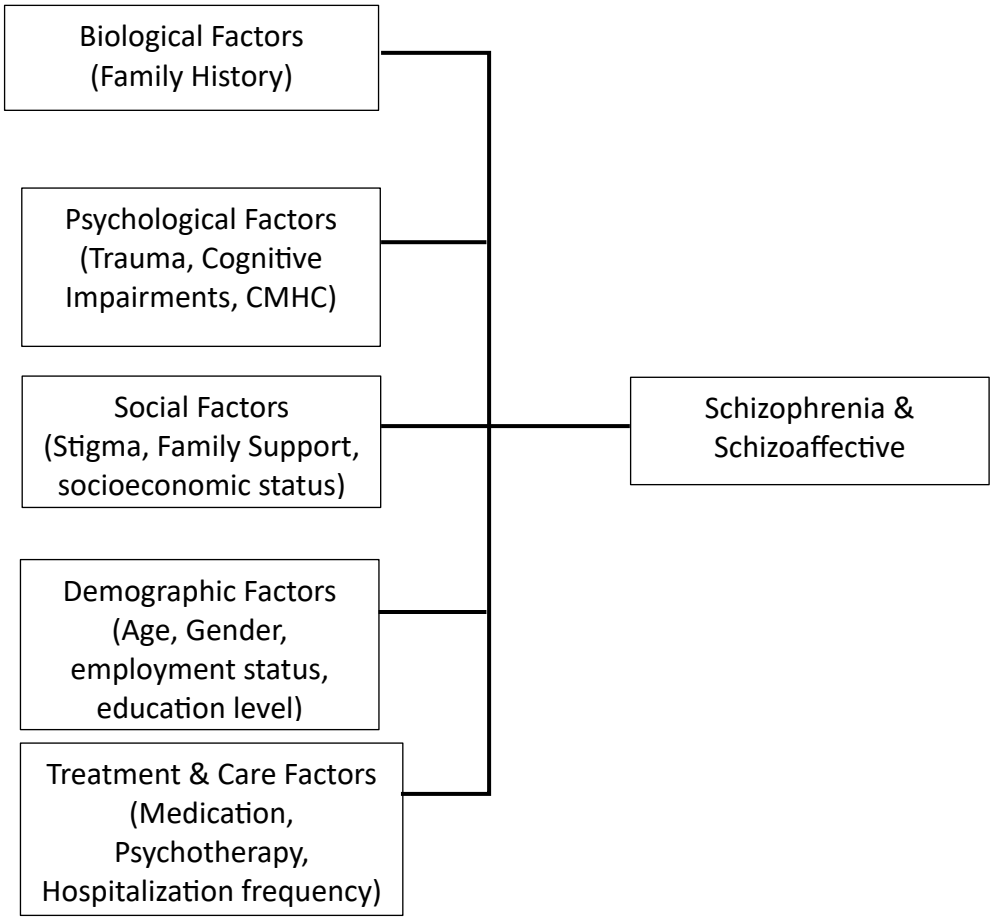
Dependent Variable:

- Prevalence of schizophrenia and schizoaffective disorder.

Independent Variables:

- Biological Factors: family history.
- Psychological Factors: Trauma history, cognitive impairments, comorbid mental health conditions.
- Social Factors: Family support, stigma, socioeconomic status.
- Demographic Factors: Age, gender, employment status, education level.
- Treatment and Care Factors: Medication type (FGAs/SGAs), Psychotherapy (CBT, family therapy), Hospitalization frequency

Conceptual Framework



C. Conceptual Definition and Objective Criteria

Conceptual Definition

Conceptual definitions clarify the key terms used in the study:

- Schizophrenia: A chronic psychiatric disorder characterized by hallucinations, delusions, and cognitive impairment as defined by the ICD-10.
- Schizoaffective Disorder: A mental disorder that combines symptoms of schizophrenia with mood disorder features (e.g., major depressive or manic episodes).
- Prevalence: The proportion of individuals within a population who have schizophrenia or schizoaffective disorder at a given time.
- Risk Factors: Biological, psychological, and social variables that contribute to the development of schizophrenia and schizoaffective disorder.
- Treatment Modalities: Includes pharmacological (antipsychotic medication) and non-pharmacological (psychotherapy, rehabilitation) approaches.

CHAPTER IV
RESEARCH METHOD

A. Type of Research

This study employs a descriptive (cross-sectional) epidemiological and demographic research design to analyze the prevalence and distribution of schizophrenia and schizoaffective disorder at Dadi Hospital Makassar from 2023 to 2024. A quantitative approach will be used to collect and analyze secondary data from medical records, focusing on demographic characteristics, epidemiological trends, and disease distribution patterns.

According to Cheng & Phillips (2014), secondary data refers to previously collected information used for new research purposes, providing a cost-effective and time-efficient method to analyze large datasets. Similarly, Johnston (2017) emphasizes that secondary data analysis allows researchers to explore patterns and trends without the need for direct data collection, reducing potential ethical and logistical concerns.

The descriptive approach in this study aims to provide an objective and systematic representation of the patient population, their demographic attributes, and the prevalence of schizophrenia and schizoaffective disorder. This research does not involve experimental manipulation but relies on statistical analysis of existing medical records, aligning with the perspective of Boslaugh (2007), who states that secondary data is particularly valuable in epidemiological studies for identifying health patterns and informing public health policies.

B. Location and Time of Research

A. **Location**: This study will be conducted in Makassar City, at the Dadi Regional Special Hospital (RSKD) of South Sulawesi Province, located on Lanto Dg. Pasewang Street No. 34, Maricaya South, Mamajang Sub-district, [illegible]y, South Sulawesi, 90113.

collection: (March–May 2025). The research will cover data **/ 2023 to December 2024**.

C. Population and Research Sample

- **Population**: The population for this study includes all patients diagnosed with schizophrenia and schizoaffective disorder at Dadi Hospital Makassar from 2023 to 2024.
- **Sample**: The study will employ total sampling (if all available cases are included) or systematic random sampling (if a subset of cases is selected) depending on the total number of patients during the research period.

D. Inclusion and Exclusion Criteria

Inclusion Criteria:

1. Patients diagnosed with schizophrenia or schizoaffective disorder based on ICD-10 criteria.
2. Patients treated at Dadi Hospital Makassar within the period 2023–2024.
3. Availability of complete medical records with demographic and clinical data.

Exclusion Criteria:

1. Patients with incomplete or missing medical records.

E. Data Collection Techniques

This research relies primarily on secondary data collection through the analysis of hospital medical records and databases. The following data categories will be collected:

Epidemiological Data

- Prevalence and incidence rates of schizophrenia and schizoaffective disorder.
- Length of hospitalization.
- Medication and treatment trends.

ɜ

ɔution: Identifying the most affected age groups.

ɗistribution: Assessing differences in disease prevalence nales and females.

- Marital status: Analyzing potential associations with disease onset or management.
- Educational background: Understanding literacy levels among patients.
- Socioeconomic status: Evaluating income levels and employment status as factors in disease burden.

F. Research Management

This research will be managed collaboratively, involving psychiatrists and medical students. Key aspects of research management include:

1. Ethical Considerations: Ensuring compliance with ethical guidelines and obtaining necessary approvals from relevant authorities.
2. Data Collection: Training research assistants on data collection protocols to ensure consistency and reliability in data gathering methods.
3. Data Analysis: Employing statistical software for quantitative analysis to identify epidemiological and demographic trends.
4. Quality Control: Conducting regular review meetings to monitor research progress, address challenges, and ensure data quality and integrity.
5. Timely Reporting: Adhering to a predefined timeline for data collection, analysis, and reporting of research findings.

Data Analysis Techniques

The collected data will undergo statistical analysis to identify trends, patterns, and relationships between variables. The following methods will be applied:

- Descriptive Statistical Analysis
- Mean, median, mode, standard deviation for continuous variables.
- Frequency and percentage distributions for categorical variables.

Comparative Analysis

- Chi-square tests to assess associations between categorical demographic factors and disease prevalence.

Regression Analysis

ssion to examine predictive relationships between demographic
disease occurrence.
is to observe patterns over the study period (2023–2024).

G. Flow of Research Implementation

The research will follow a structured flow to achieve its objectives:

1. **Planning Phase**: Formulation of research questions, development of research protocols, and obtaining necessary approvals.
2. **Data Collection Phase**: Extracting data from medical records based on predefined criteria and ensuring data accuracy.
3. **Data Analysis Phase**: Applying statistical methods to examine demographic and epidemiological trends in schizophrenia and schizoaffective disorder.
4. **Interpretation and Synthesis Phase**: Deriving meaningful conclusions from quantitative findings to understand prevalence patterns.
5. **Reporting Phase**: Disseminating research findings through academic publications, presentations, and stakeholder engagements.

CHAPTER V
RESULT & DISCUSSION

A. Result

After data collection, the total number of patients in 2023 is 1243 patients and then were analysed using microsoft excel and SPSS by Ubisoft which are divided into several criteria suing frequency distribute table as follows

Table 1.1 Frequency Of patient with Schizoaffective and Schizophrenia Disorder Years 2023

Variable	Frequency	Percentages
Ages		
15-24 years	11	0.9 %
25-44 years	745	59.6 %
45-64 years	422	33.8 %
>65 years	71	5.7 %
Gender		
Male	893	71.5 %
Female	356	28.5 %
Province		
Ternate	1	0.1 %
South Sumatra	1	0.1 %
Southeast Sulawesi	11	0.9 %
South Sulawesi	1159	92.8 %
West Sulawesi	47	3.8 %
Papua	9	0.7 %
NTT	2	0.2 %
Maluku	13	1 %
Kalimantan	6	0.5 %
Education		
Not In School	206	16.5 %
D3	22	1.8 %
D4	11	0.9 %
S1	85	6.8 %
S2	10	0.8 %
S3	2	0.2 %
SMP	179	14.3 %
SMA	619	49.6 %
SMK	115	9.2 %
Jobs		
Pharmeuticals	1	0.1 %
	657	52.6 %
	1	0.1 %
	35	2.8 %
	1	0.1 %
	5	0.4 %
	153	12.2 %
	15	1.2 %
	2	0.2 %

Fisherman	6	0.5 %
Honorarium employee	4	0.3 %
Civil servant	40	3.2 %
Self employed	145	11.6 %
Farmer	108	8.6 %
Retiree	16	1.3 %
Scholar	54	4.3 %
Armed Forces	5	0.4 %
Marital Status		
Death divorce	19	1.5 %
Widowed	27	2.2 %
Not married	684	54.8 %
Life divorce	26	2.1 %
Married	493	39.5 %
Religion		
Islam	1168	93.5 %
Hinduism	4	0.3 %
Buddhism	2	0.2 %
Other religions	1	0.1 %
Catholicism	23	1.8 %
Protestantism	51	4.1 %
Duration Of Treatment		
<10 Days	265	21.2 %
10-30 Days	199	15.9 %
30-90 Days	349	27.9 %
>90 Days	436	34.9 %
Diagnosis		
Schizoaffective Disorder	265	21.2 %
Paranoid Schizophrenia	164	13.1 %
Hebephrenic Schizophrenia	133	10.6 %
Catatonic Schizophrenia	262	21 %
Unclassified Schizophrenia	425	34 %

The data above consists of the largest age group in the 25-44 year group, and consists of a majority of men as many as 893, most from the province of South Sulawesi as many as 1159 with a history of the last high school education as many as 619 patients with the majority not working as many as 657. the most marital status is not married as many as 684 with the majority of religions 1168. The longest duration of treatment in the form of categorical groups for more than 90 days of

atients. the majority of diagnoses with schizoaffective as many nizophrenia as many as 164, hebephrenic as many as 133, 262, unclassified as many as 425.

results of the analysis using Microsoft Excel and SPSS in 2024

Table 1.2 Frequency Of patient with Schizoaffective and Schizophrenia Disorder Years 2024

Variable	Frequency	Percentages
Ages		
15-24 years	129	10.9 %
25-44 years	457	38.5 %
45-64 years	567	47.8 %
>65 years	34	2.9%
Gender		
Male	883	74.4 %
Female	304	25.6 %
Province		
Jakarta	1	0.1 %
West Java	1	0.1 %
Kalimantan	4	0.3 %
Maluku	13	1.1 %
NTT	3	0.3 %
Papua	6	0.5 %
West Sulawesi	44	3.7 %
South Sulawesi	1100	92.7 %
Central Sulawesi	3	0.3 %
Southeast Sulawesi	12	1 %
Education		
Not In School	197	16.6 %
Elementary	168	14.2%
D3	12	1 %
D4	11	0.9 %
S1	49	4.1 %
S2	1	0.1 %
SMP	317	26.7 %
SMA	187	15.8 %
SMK	245	20.6 %
Jobs		
Not Have Jobs	752	63.4 %
Laborer	24	2 %
Lecturer	2	0.2 %
Teacher	1	0.1 %
Housewife	94	7.9 %
	13	1.1 %
	33	2.8 %
	101	8.5 %
	109	9.2 %
	6	0.5 %
	39	3.3 %
	13	1.1 %

Marital Status		
Death divorce	18	1.5 %
Widowed	23	1.9 %
Not married	738	62.2 %
Life divorce	41	3.5 %
Married	367	30.9 %
Religion		
Islam	1053	88.7 %
Buddhism	15	1.3 %
Catholicism	77	6.5 %
Protestantism	42	3.5 %
Duration Of Treatment		
<10 Days	54	4.5 %
10-30 Days	249	21 %
30-90 Days	395	33.3 %
>90 Days	489	41.2 %
Diagnosis		
Schizoaffective Disorder	261	22 %
Paranoid Schizophrenia	35	2.9 %
Hebephrenic Schizophrenia	117	9.9 %
Catatonic Schizophrenia	170	14.3 %
Unclassified Schizophrenia	604	50. %

The data above consists of the 45-64 years age group with a total of 567 patients with the majority dominated by men. The majority of patients come from South Sulawesi totalling 1100. the last educational history of junior high school as many as 317 patients.

The following are the results of the chi-square analysis using the schizophrenia and schizoaffective diagnosis variables, then examining the data distribution with a crosstab table in the SPSS application or software.

Table 1.3 Chi-Square Of Diagnosis And Ages On patient with Schizoaffective and Schizophrenia Disorder Years 2023

	5-14 Years	25-44 Years	45-64 Years	>65 Years	Total	P-Value
tive	4	175	82	4	265	0.001
nia	0	114	46	4	164	

	Hebephrenic Schizophrenia	1	64	56	12	133
	Catatonic Schizophrenia	1	146	89	26	262
	Unclassified Schizophrenia	5	246	149	25	425
Total		11	745	422	71	1249

Table 1.4 Chi-Square Of Diagnosis And Gender On patient with Schizoaffective and Schizophrenia Disorder Years 2023

		Mens	Womens	Total	P- Value
Diagnose	Schizoaffective Disorder	203	62	265	0.001
	Paranoid Schizophrenia	133	31	164	
	Hebephrenic Schizophrenia	95	38	133	
	Catatonic Schizophrenia	195	67	262	
	Unclassified Schizophrenia	267	158	425	
Total		893	356	1249	

Table 1.5 Chi-Square Of Diagnosis And Provence On patient with Schizoaffective and Schizophrenia Disorder Years 2023

		Ternate	Sumatera Selatan	Sulawesi Tenggara	Sulawesi Selatan	Sulawesi barat	Papua	NTT	Maluku	Kalimantan	Total	P value
Diagnose	Schizoaffective Disorder	0	0	2	242	15	2	2	1	1	265	0.260
	Paranoid Schizophrenia	0	1	1	155	4	0	0	2	1	164	
	Hebephrenic Schizophrenia	0	0	1	124	3	2	0	2	1	133	
	Catatonic Schizophrenia	1	0	6	233	15	2	0	3	2	262	
	Unclassified Schizophrenia	0	0	1	405	10	3	0	5	1	425	
Total		1	1	11	1159	47	9	2	13	6	1249	

Table 1.6 Chi-Square Of Diagnosis And Educational Stats On patient with Schizoaffective and Schizophrenia Disorder Years 2023

		Not going to school	D3	D4	S1	S1	S2	SMP	SMA	SMK		P-Value
Diagnose	**Schizoaffective Disorder**	11	10	3	32	0	0	26	108	75	265	0.001
	Paranoid Schizophrenia	46	0	5	0	0	0	81	21	11	164	
	Hebephrenic Schizophrenia	1	12	0	47	10	2	8	29	24	133	
	Catatonic Schizophrenia	12	0	0	4	0	0	58	186	2	262	
	Unclassified Schizophrenia	136	0	3	2	0	0	6	275	3	425	
Total		206	22	11	85	10	2	179	619	115	1249	

Table 1.7 Chi-Square Of Diagnosis And Jobs On patient with Schizoaffective and Schizophrenia Disorder Years 2023

		Pharmals	Not Working	Midwife	Labor	Lecturer	Teacher	Housewife	Employee	Notaris	Fisherman	Honorer	PNS	Wiraswasta	Farmer	Retiree	Student	Armed		P value
Diagnosis	Schizoaffective Disorder	0	171	0	6	0	0	20	6	0	0	2	6	19	14	0	19	1	265	0.001
	Paranoid Schizophrenia	0	102	0	5	0	1	11	1	0	3	1	5	19	10	0	5	1	164	
	Hebephrenic Schizophrenia	1	26	1	5	1	4	11	4	1	0	1	21	29	3	5	19	1	133	
	Catatonic Schizophrenia	0	120	0	9	0	0	28	1	0	1	0	3	43	38	11	7	1	262	
	Unclassified Schizophrenia	0	238	0	10	0	0	83	3	1	2	0	5	35	43	0	4	1	425	
Total		1	657	1	35	1	5	153	15	2	6	4	40	145	108	16	54	5	1249	

Table 1.8 Chi-Square Of Diagnosis And Duration of treatment On patient with Schizoaffective and Schizophrenia Disorder Years 2023

		<10 Days	10-30 Days	30-90 Days	>90 Days	Total	P-Value
Diagnosis	**Schizoaffective Disorder**	36	80	78	71	265	0.001
	Paranoid Schizophrenia	27	14	52	71	164	
	[illegible]ia	86	22	11	14	133	
	[illegible]ia	49	18	52	143	262	
	[illegible]ia	67	65	156	137	425	
		265	199	349	436	1249	

Table 1.9 Chi-Square Of Diagnosis And Ages On patient with Schizoaffective and Schizophrenia Disorder Years 2024

		15-24 Years	25-44 Years	45-64 Years	>65 Years	Total	P-Value
Diagnose	Schizoaffective Disorder	39	93	119	10	261	0.120
	Paranoid Schizophrenia	3	20	11	1	35	
	Hebephrenic Schizophrenia	11	50	51	5	117	
	Catatonic Schizophrenia	21	66	81	2	170	
	Unclassified Schizophrenia	55	228	305	16	604	
Total		129	457	567	34	1187	

Table 1.10 Chi-Square Of Diagnosis And Gender On patient with Schizoaffective and Schizophrenia Disorder Years 2024

		Men	Women	Total	P-Value
Diagnose	Schizoaffective Disorder	194	67	261	0.355
	Paranoid Schizophrenia	27	8	35	
	Hebephrenic Schizophrenia	96	21	117	
	Catatonic Schizophrenia	124	46	170	
	Unclassified Schizophrenia	442	162	604	
Total		883	304	1187	

Table 1.11 Chi-Square Of Diagnosis And Provence On patient with Schizoaffective and Schizophrenia Disorder Years 2024

		Jakarta	West Java	North Kalimantan	Maluku North	NTT	Papua	Sul bar	South Sulawesi	Sulawesi Tengah	Sulawesi Tenggara	Total	p-value
Diagnose	Schizoaffective Disorder	0	0	1	3	0	0	6	246	2	3	261	0.020
	Paranoid Schizophrenia	0	0	0	0	0	0	4	30	0	1	35	
	Hebephrenic Schizophrenia	0	0	0	1	0	1	2	113	0	0	117	
	Catatonic Schizophrenia	0	1	2	2	3	1	13	146	0	2	170	
	Unclassified Schizophrenia	1	0	1	7	0	4	19	565	1	6	604	
Total		1	1	4	13	3	6	44	1100	3	12	1187	

Table 1.12 Chi-Square Of Diagnosis And Education On patient with Schizoaffective and Schizophrenia Disorder Years 2024

		Not Going School	D3	D4	S1	S2	SMP	SMA	SD	Total	P-Value
Diagnosis	Schizoaffective Disorder	33	5	5	16	68	28	60	46	261	<0.001
	Paranoid Schizophrenia	22	0	0	0	4	7	1	1	35	
	Hebephrenic Schizophrenia	37	0	1	1	29	19	11	19	117	
	Catatonic Schizophrenia	30	3	0	10	38	29	36	23	170	
	Unclassified Schizophrenia	75	4	5	22	178	104	137	79	604	
Total		197	12	11	49	317	187	245	168	1187	

Table 1.13 Chi-Square Of Diagnosis And Jobs On patient with Schizoaffective and Schizophrenia Disorder Years 2024

n	Labor	Lecturer	Teacher	Housewife	Employee	PNS	Trader	Farmer	Retire	Student	Armed		P-Value
	6	0	0	28	4	16	9	20	2	23	3	261	0.001

	Paranoid Schizophrenia	35	0	0	0	0	0	0	0	0	0	0	0	35
	Hebephrenic Schizophrenia	117	0	0	0	0	0	0	0	0	0	0	0	117
	Catatonic Schizophrenia	95	0	0	0	9	1	2	33	25	0	5	0	170
	Unclassified Schizophrenia	355	18	2	1	57	8	15	59	64	4	11	10	604
Total		752	24	2	1	94	13	33	101	109	6	39	13	1187

Table 1.14 Chi-Square Of Diagnosis And Duration of Treatment On patient with Schizoaffective and Schizophrenia Disorder Years 2024

		<10 Days	10-30 Days	30-90 Days	>90 Days	Total	P-Value
Diagnosis	Schizoaffective Disorder	43	47	72	99	261	0.001
	Paranoid Schizophrenia	6	0	29	0	35	
	Hebephrenic Schizophrenia	0	19	54	44	117	
	Catatonic Schizophrenia	2	23	62	83	170	
	Unclassified Schizophrenia	3	160	178	263	604	
Total		54	249	395	489	1187	

B. Discussion

This study presents an updated epidemiological profile of Schizophrenia and Schizoaffective Disorder at Dadi Hospital Makassar over the 2023–2024 period. Schizophrenia remained the dominant diagnosis in both years, accounting for approximately four out of five cases, while Schizoaffective Disorder consistently represented about one-fifth of patients. This distribution is broadly consistent with global trends, although the proportion of Schizoaffective Disorder cases is slightly higher than international estimates. This may reflect

as a major referral center for psychiatric care in Eastern

erences in diagnostic practices and case mix.

le patients formed the majority of cases, particularly for

his finding aligns with research indicating earlier onset, higher

severity, and more chronic courses of illness in men. Schizoaffective Disorder, however, showed a relatively more balanced gender pattern, suggesting different pathways or triggers for illness onset.

Age distribution patterns revealed that most patients with either diagnosis were between 25 and 64 years, highlighting the considerable social and economic impact of these disorders during prime working years. The high proportion of unemployed patients—more than half in both years—demonstrates the strong link between severe mental illness and occupational dysfunction. This underscores the need for psychosocial rehabilitation and employment support programs, especially for patients with chronic illness trajectories.

Educational attainment was generally low among both diagnostic groups, with many patients having only junior or senior high school education or no formal education at all. Limited education can reduce mental health literacy, delay help-seeking, and hinder treatment adherence, potentially contributing to the chronicity observed in many cases.

Most patients originated from South Sulawesi, which is expected given the hospital's location and referral network. However, the smaller number of patients from other provinces may reflect barriers to access, such as distance, transportation costs, and limited local referral pathways. Expanding decentralized mental health services and outreach in remote provinces could help address these disparities.

Length of hospital stay was often prolonged, especially for Schizophrenia patients, with many requiring more than 90 days of treatment. Prolonged hospitalization reflects illness severity, functional impairment, and sometimes a [illegible] community-based support for reintegration. Schizoaffective [illegible]enerally showed similar hospitalization patterns, suggesting [illegible]s require long-term treatment planning and continuity of care.

Overall, these findings reinforce that while Schizophrenia remains the predominant psychotic disorder at Dadi Hospital Makassar, Schizoaffective Disorder represents a significant proportion of cases and requires equal attention in clinical management and policy planning. Interventions should focus on early detection, reduction of treatment delays, enhancement of community-based mental health services, and targeted vocational rehabilitation to improve functional outcomes for both diagnostic groups.

CHAPTER VI
CONCLUSIONS AND SUGGESTIONS

A. Conclusion

This study analyzed 2,436 patients diagnosed with Schizophrenia or Schizoaffective Disorder at Dadi Hospital Makassar during 2023–2024. In 2023, Schizophrenia accounted for 984 patients (78.8%) and Schizoaffective Disorder for 265 patients (21.2%). In 2024, Schizophrenia accounted for 926 patients (78.0%) and Schizoaffective Disorder for 261 patients (22.0%). Across both years, Schizophrenia remained the predominant diagnosis.

Both disorders were more common in male patients and in the 25–64 year age range. The majority of patients originated from South Sulawesi, had low educational attainment, and were unemployed. Significant associations were found between diagnosis and education level, employment status, and duration of treatment. Many patients required hospitalization for more than 90 days, indicating the chronic nature of these conditions.

Based on the descriptive and statistical analysis of schizophrenia and schizoaffective disorder at Dadi Hospital Makassar for the years 2023–2024, the following conclusions can be drawn:

- Prevalence and Dominant Diagnosis

  Schizophrenia was the most prevalent diagnosis in both 2023 and 2024, followed by schizoaffective disorder. This indicates a challenge in accurately categorizing patients into specific schizophrenia subtypes, possibly due to overlapping symptoms or incomplete diagnostic information.

- Demographic Characteristics

  In 2023, diagnosis showed a statistically significant relationship with age and , in 2024, those associations were not significant, suggesting or improved data recording.

  Distribution

  ginated from South Sulawesi, reflecting the hospital's role as a ealth referral center. In 2024, a significant relationship was

observed between province of origin and diagnosis , while no such association was found in 2023.

- Educational Background

A significant relationship was found between diagnosis and education level in both years. Most patients had low levels of education, particularly at the junior and senior high school levels, with a large portion not completing formal education.

- Occupational Status

The highest proportion of patients in both years were unemployed. A strong relationship was found between employment status and diagnosis, reinforcing the link between economic vulnerability and the burden of mental illness.

- Duration of Treatment

Many patients required extended periods of care, particularly those with unclassified and catatonic schizophrenia. There was a statistically significant relationship between diagnosis and duration of treatment in both years, highlighting the chronic nature of these disorders.

B. Suggestion

This study should be conducted in a longer time interval with a minimum duration of 5 years, in order to see trends and graphs of the desired hypothesis results, besides that, a more accurate data analysis must be carried out, namely seeing the correlation by conducting a spearman or person analysis which is then converted into valid data. besides that, variables for improving care after a long duration of treatment and additional variables for the use of antipsychotic therapy doses to see the effectiveness of each therapy used should be added.