

Characteristics of Patients with Post-Traumatic Stress Disorder (PTSD) at Ibnu Sina Teaching Hospital, Makassar

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Article Info	ABSTRACT
Keywords: Post Traumatic Stress Disorder; Trauma Exposure; Patient Characteristics; Mental Health	<p>Background: Post Traumatic Stress Disorder (PTSD) is a trauma- and stressor-related mental disorder that can significantly impair psychological, social, and occupational functioning. Despite increasing awareness of PTSD in Indonesia, local data describing patient characteristics remain limited, particularly in teaching hospital settings. Objective: This study aimed to describe the demographic characteristics, types of traumatic exposure, and dominant symptom clusters of PTSD patients treated at Ibnu Sina Makassar Teaching Hospital. Methods: This descriptive cross-sectional study used medical records of PTSD patients treated at the Psychiatric Outpatient Clinic of Ibnu Sina Makassar Teaching Hospital from September 2024 to September 2025. All eligible patients were included using total sampling. Data were analyzed descriptively. Results: Most patients were aged 19–39 years (60.0%) and were female (62.0%). The majority had a senior high school education (60.0%) and were students (46.0%). Interpersonal conflict was the most common traumatic exposure (32.0%), followed by physical violence (26.0%) and occupational trauma (18.0%). Intrusive symptoms were the most frequently reported PTSD symptom cluster (38.0%), followed by negative alterations in mood and cognition (26%) and arousal and reactivity symptoms (22%). Conclusion: PTSD at Ibnu Sina Makassar Teaching Hospital predominantly affected young adults, females, and students, with interpersonal trauma as the leading precipitating factor. These findings highlight the need for targeted, trauma-focused mental health interventions and provide valuable local epidemiological data to support evidence-based PTSD management and service planning.</p>

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INTRODUCTION

Post Traumatic Stress Disorder (PTSD) is a mental health disorder that develops following exposure to a traumatic event involving actual or threatened death, serious injury, or threats to personal safety or the safety of others. PTSD is characterized by a range of psychological symptoms, including intrusive memories or flashbacks, recurrent nightmares, excessive fear,

sleep disturbances, hyperarousal, and avoidance of trauma-related stimuli. In addition to psychological manifestations, PTSD may also be associated with physical symptoms such as disordered eating patterns, chronic fatigue, and reduced immune function, which further impair overall health status (American Psychiatric Association, 2022).

According to the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5), PTSD is classified under trauma- and stressor-related disorders. The onset of PTSD symptoms may occur immediately after the traumatic event or be delayed for months or even years. Traumatic exposures that can precipitate PTSD are diverse and include natural disasters, traffic accidents, physical or sexual violence, armed conflict, and severe medical experiences. This wide range of potential triggers highlights the complexity of PTSD and its relevance across various populations and clinical settings (Christy A. Blevins et al., 2015).

Globally, the World Health Organization (WHO) estimates that the prevalence of PTSD is approximately 3.9% in the general population and increases to 5.6% among individuals who have experienced traumatic events. The highest prevalence rates are reported among populations exposed to extreme violence, armed conflict, or natural disasters. In Indonesia, comprehensive national epidemiological data on PTSD remain limited; however, available studies suggest that PTSD is one of the most frequently encountered mental health disorders in psychiatric services, particularly in regions affected by disasters or social conflict (Bovin et al., 2016).

The impact of PTSD extends beyond individual psychological distress, affecting social functioning, economic productivity, and overall quality of life. Individuals with PTSD often experience difficulties in maintaining employment, academic performance, and interpersonal relationships. Furthermore, PTSD imposes a substantial economic burden on families and healthcare systems due to the need for long-term treatment and the high risk of psychiatric comorbidities, including depression and substance use disorders (Bonanno, 2004).

Previous studies have explored various aspects of PTSD, including patient characteristics, risk factors, and therapeutic interventions. Research by Daddah and Donatien (2022) among traffic accident victims demonstrated that younger age, female sex, and longer hospitalization duration were significantly associated with PTSD development. Similarly, a study conducted by Sutrisno and Lestari (2020) at RSUD dr. Soetomo Surabaya found that most PTSD patients had a history of severe trauma, particularly physical or sexual violence, and commonly presented with sleep disturbances and severe anxiety. Other studies have highlighted the effectiveness of Cognitive Behavioral Therapy (CBT) in reducing PTSD symptoms, as well as variations in symptom severity based on the type of trauma experienced, with interpersonal violence being associated with more severe clinical presentations (Daddah et al., 2022; Supiriani Eka Lestari, 2020).

Ibnu Sina Makassar Teaching Hospital is a major teaching and referral hospital in South Sulawesi that provides comprehensive mental health services. Reports from the psychiatric department indicate an increasing number of patients diagnosed with PTSD in recent years, paralleling heightened public awareness of mental health issues and increased exposure to traumatic events in the community. Despite this trend, there is currently a lack of

comprehensive data describing the characteristics of PTSD patients treated at this institution (Ramadhani & Nurwati, 2022; Wulandari, 2024).

Understanding patient characteristics, including age, sex, educational level, occupation, and types of traumatic exposure, is essential for identifying epidemiological patterns of PTSD and optimizing mental health services (Brewin et al., 2010). Such information is crucial for developing targeted interventions, improving clinical management, and informing future research on risk factors, treatment effectiveness, and relapse prevention strategies (Brewin et al., 2017).

Therefore, this study aims to describe the characteristics of patients with Post Traumatic Stress Disorder (PTSD) treated at Ibnu Sina Makassar Teaching Hospital during the period of September 2024 to September 2025. The findings of this study are expected to provide valuable insights into the local profile of PTSD patients and support evidence-based mental health care planning and delivery.

METHODS

Study Design

This study employed a descriptive cross-sectional design aimed at describing the characteristics of patients and the types of traumatic events experienced at a single point in time. Data were collected simultaneously to obtain a comprehensive overview of demographic, psychosocial, and trauma-related factors associated with Post Traumatic Stress Disorder (PTSD). A total sampling technique was applied, whereby all patients who met the study criteria during the study period were included without prior sample selection.

Study Setting and Period

The study was conducted at the Psychiatric Outpatient Clinic (Poli Jiwa) of Ibnu Sina Makassar Teaching Hospital, located on Jl. Urip Sumoharjo Km 5, Makassar, Indonesia. Data collection was carried out in November 2025, utilizing medical records of patients who visited the clinic during the period from September 2024 to September 2025.

Study Variables

The independent variables in this study consisted of demographic and psychosocial characteristics, including age, sex, educational level, and occupation, as well as the type of traumatic event experienced by the patients. The dependent variable was the occurrence of Post Traumatic Stress Disorder (PTSD) among patients who attended Ibnu Sina Makassar Teaching Hospital during the study period.

Operational Definitions

Post Traumatic Stress Disorder (PTSD) was defined as a post-traumatic psychological disorder characterized by symptoms of intrusion, avoidance, negative alterations in mood and cognition, and hyperarousal, as documented in patients' medical records. Demographic factors referred to basic respondent characteristics, including age, sex, education, and occupation, which may influence the risk of PTSD. Traumatic events were defined as highly stressful experiences that threaten an individual's physical or psychological safety and may elicit severe stress reactions. All variables were obtained from medical records; PTSD

diagnosis and demographic variables were analyzed using nominal scales, while types of traumatic events were analyzed using an ordinal scale.

Study Population and Sample

The study population comprised all patients diagnosed with Post Traumatic Stress Disorder (PTSD) or those with a documented history of psychological trauma who attended the Psychiatric Outpatient Clinic of Ibnu Sina Makassar Teaching Hospital between September 2024 and September 2025. The study sample included all patients diagnosed with PTSD during the study period who fulfilled the inclusion criteria, in accordance with the total sampling method.

Eligibility Criteria

Patients were included if they had a clinical diagnosis of Post Traumatic Stress Disorder (PTSD) or a documented history of psychological trauma based on the criteria of the *Indonesian Classification and Diagnostic Guidelines for Mental Disorders (PPDGJ)* and/or ICD-10, as recorded in medical records. Patients with other medical conditions that could affect the diagnosis or outcomes related to PTSD were excluded from the study.

Data Collection

Data were collected through systematic review and observation of patients' medical records using a structured data extraction form.

RESULTS AND DISCUSSION

Patient Characteristics

A total of 50 patients diagnosed with Post Traumatic Stress Disorder (PTSD) at Ibnu Sina Makassar Teaching Hospital during the period of September 2024–September 2025 were included in this study. The distribution of patient characteristics is summarized in Tables 1–6.

Age Distribution

Table 1. Age Distribution of PTSD Patients

Age group (years)	Frequency (n)	Percentage (%)
<18	9	18.0
19–39	30	60.0
40–59	10	20.0
>60	1	2.0
Total	50	100.0

As shown in Table 1, the majority of PTSD patients were aged 19–39 years (60.0%). Patients aged under 18 years accounted for 18.0%, while those aged 40–59 years represented 20.0%. The smallest proportion was observed in patients aged over 60 years (2.0%).

Sex Distribution

Table 2. Sex Distribution of PTSD Patients

Sex	Frequency (n)	Percentage (%)
Male	19	38.0
Female	31	62.0

Sex	Frequency (n)	Percentage (%)
Total	50	100.0

Table 2 shows that PTSD was more prevalent among female patients, who accounted for 62.0% of cases, compared to male patients (38.0%).

Educational Level

Table 3. Educational Level of PTSD Patients

Educational level	Frequency (n)	Percentage (%)
Junior high school (SLTP)	6	12.0
Senior high school (SLTA)	30	60.0
Higher education	14	28.0
Total	50	100.0

Based on Table 3, most patients had completed senior high school (60.0%), followed by those with higher education (28.0%). Patients with junior high school education constituted 12.0% of the sample.

Occupational Status

Table 4. Occupational Distribution of PTSD Patients

Occupation	Frequency (n)	Percentage (%)
Student	23	46.0
Housewife	8	16.0
Employed	15	30.0
Unemployed	4	8.0
Total	50	100.0

As shown in Table 4, students represented the largest occupational group (46.0%), followed by employed individuals (30.0%). Housewives accounted for 16.0%, while unemployed patients constituted 8.0%.

Types of Traumatic Events

Table 5. Types of Trauma Experienced by PTSD Patients

Type of trauma	Frequency (n)	Percentage (%)
Physical violence	13	26.0
Sexual violence	4	8.0
Natural disaster	1	2.0
Interpersonal conflict	16	32.0
Medical trauma	7	14.0
Occupational trauma	9	18.0
Total	50	100.0

Table 5 indicates that interpersonal conflict was the most common traumatic exposure (32.0%), followed by physical violence (26.0%). Occupational trauma accounted for 18.0%, while medical trauma was reported by 14.0% of patients. Sexual violence and natural disasters were less frequently reported.

PTSD Symptom Distribution

Table 6. Distribution of Dominant PTSD Symptom Clusters

PTSD symptom cluster	Frequency (n)	Percentage (%)
Intrusion	19	38.0
Avoidance	7	14.0
Negative mood and cognition	13	26.0
Arousal and reactivity	11	22.0
Total	50	100.0

As presented in Table 6, intrusive symptoms were the most frequently reported PTSD symptom cluster (38.0%). Negative alterations in mood and cognition were reported by 26.0% of patients, followed by arousal and reactivity symptoms (22.0%). Avoidance symptoms were the least frequently observed (14.0%).

Discussion

Age Characteristics of PTSD Patients

The findings of this study indicate that the majority of PTSD patients treated at Ibnu Sina Makassar Teaching Hospital were in the 19–39 year age group (60%), followed by patients aged <18 years (18%), 40–59 years (20%), and >60 years (2%). This age distribution aligns with global epidemiological data reported in *European Psychiatry* (2021), which indicate that PTSD is most frequently diagnosed among young adults aged 25–35 years, with the lowest prevalence observed in individuals aged 55–64 years (Folayan et al., 2024; Vita et al., 2022).

The predominance of PTSD among individuals in the productive age group is consistent with longitudinal findings by Salma M. Abdalla et al. (2024), which demonstrated that PTSD prevalence is highest among younger populations and decreases progressively with increasing age. Similarly, Nadya Nathalia et al. (2024) reported that peak PTSD prevalence in both males and females occurs between the ages of 34 and 54 years. This pattern may be explained by the higher exposure to traumatic events during early adulthood, including violence, accidents, occupational stress, and natural disasters (Abdalla et al., 2024; Evangelista et al., 2022).

PTSD among individuals of productive age has substantial socioeconomic consequences. Davis et al. (2022) reported that the economic burden of PTSD in the United States reached USD 232.2 billion in 2018, with unemployment contributing USD 42.7 billion among the civilian population. Loss of productivity and employment instability were identified as major consequences of PTSD in this age group, underscoring the broader societal impact of the disorder (Davis et al., 2022).

The finding that 18% of PTSD patients were aged under 18 years is consistent with data from the Indonesia National Adolescent Mental Health Survey (I-NAMHS) 2021, which reported a PTSD prevalence of 0.5% among Indonesian adolescents in the general population. The higher proportion observed in this study likely reflects the hospital-based nature of the sample, which includes clinically diagnosed cases requiring specialist care. Additionally, (Zhai & Du, 2024). reported an increase in PTSD prevalence among university

students from 3.4% (2017–2018) to 7.5% (2021–2022), suggesting an increasing burden of PTSD among younger populations.

Sex Characteristics of PTSD Patients

This study found that PTSD was more prevalent among female patients (62%) than males (38%), yielding a female-to-male ratio of approximately 1.6:1. This finding is highly consistent with global epidemiological data. According to the National Institute of Mental Health, the annual prevalence of PTSD among women (5.2%) is nearly three times higher than that among men (1.8%). (Olff, 2017) similarly reported lifetime PTSD prevalence rates of 10–12% in women compared to 5–6% in men.

A meta-analysis by (Haering et al., 2024) in the *Journal of Abnormal Psychology* demonstrated that women exhibit higher PTSD prevalence (OR = 1.72) and greater symptom severity ($g = 0.31$) than men as early as one month post-trauma. Several mechanisms may explain this disparity. First, women are more frequently exposed to interpersonal trauma, particularly sexual violence, which carries the highest conditional risk for PTSD. (Kessler et al., 2017), using data from the WHO World Mental Health Surveys, reported the highest PTSD risk following rape (19.0%), intimate partner violence (11.7%), and other forms of sexual violence (10.5%).

Second, biological and neurobiological differences play a role. (Olff, 2017) noted that women tend to have a more sensitive hypothalamic–pituitary–adrenal (HPA) axis, whereas men exhibit stronger physiological hyperarousal responses. Third, women demonstrate more intense acute post-traumatic responses, including peritraumatic fear, dissociation, and negative cognitions, all of which are strong predictors of PTSD. (Haering et al., 2024) further identified acute stress disorder, neuroticism, lifetime sexual violence exposure, anxiety sensitivity, and pre-trauma anxiety symptoms as full mediators of the relationship between sex and PTSD severity.

These findings have important clinical implications. Clinicians should apply gender-sensitive screening and management strategies, with particular attention to interpersonal trauma histories in female patients and therapeutic approaches that address heightened emotional vulnerability and social support needs.

Educational Level Characteristics of PTSD Patients

Educational attainment is a critical sociodemographic factor in PTSD epidemiology. Existing literature consistently demonstrates an inverse relationship between education level and PTSD risk. Folayan et al. (2024) reported that individuals with no formal education or only primary education had markedly higher odds (up to OR 13.9) of developing post-traumatic stress symptoms compared with those with higher education (Vita et al., 2022).

Several mechanisms may explain this association. First, lower educational attainment is often linked to lower socioeconomic status, which increases exposure to traumatic events and limits access to recovery resources. (D. Wang et al., 2018) demonstrated that low socioeconomic status significantly increased psychiatric symptom prevalence among individuals with childhood trauma histories.

Second, higher education may enhance cognitive coping strategies and emotional regulation skills. (Y. Wang et al., 2023) reported that perceived social status decline was

associated with increased PTSD symptoms through heightened perceived vulnerability to illness. Third, individuals with higher education levels typically have better access to mental health information and healthcare services.

Clinically, these findings highlight the need for tailored interventions based on patients' educational backgrounds. Psychoeducation materials should be simplified for patients with lower educational attainment, and early detection programs should actively target populations with limited access to mental health services.

Occupational Characteristics of PTSD Patients

Employment status is both a risk factor for and a consequence of PTSD. (Ian C Fischer et al., 2023) reported that veterans with PTSD were more than twice as likely to be unemployed (OR = 2.41) and nearly four times more likely to experience disability (OR = 3.84) than those without PTSD.

PTSD substantially impairs work functioning. (Davis et al., 2022) estimated that unemployment and productivity loss account for approximately 35% of the total economic burden of PTSD. Core PTSD symptoms—such as intrusive memories, avoidance behaviors, and hyperarousal—interfere with concentration, workplace relationships, and task completion. Data from Psychiatrist.com indicate unemployment rates of 10.5% in men and 15.8% in women with PTSD in the U.S. civilian population.

Certain occupations carry a higher PTSD risk. (Stergiopoulos et al., 2021) reported elevated PTSD rates among police officers, public transportation workers, and employees injured at work. Workplace-based interventions have shown promising outcomes in facilitating return-to-work among individuals with occupational PTSD.

These findings underscore the importance of vocational rehabilitation as an integral component of PTSD management. Individual Placement and Support (IPS) programs have demonstrated effectiveness, with (Mueller et al., 2019) reporting competitive employment rates of 39% among veterans receiving IPS compared with 23% in transitional work programs.

Types of Traumatic Events Associated with PTSD

The type of traumatic exposure is a key determinant of PTSD development. (Kessler et al., 2017) reported the highest conditional PTSD risks following rape (19.0%), intimate partner violence (11.7%), kidnapping (11.0%), and other forms of sexual violence (10.5%).

Interpersonal trauma consistently confers a higher PTSD risk than non-interpersonal trauma. An umbrella review by (Schincariol et al., 2024) reported an overall PTSD prevalence of 23.95%, with sexual and interpersonal violence producing more severe and disabling psychological effects than natural disasters.

Traffic accidents are a major cause of PTSD in non-military populations. (Fekadu et al., 2019) reported that 46.5% of road traffic accident survivors developed PTSD, while Rahmadian et al. (2016) reported a prevalence of 43% in Indonesia. Significant risk factors included witnessing death, severe sleep disturbances, and impaired family functioning. (Ahmad Ali Rahmadian et al., 2016; Fekadu et al., 2019)

Domestic violence is another major PTSD contributor, particularly among women. Fernández-Fillolet et al. (2021) reported PTSD prevalence ranging from 31% to 84.4%

among intimate partner violence survivors, while Roland et al. (2024) reported a prevalence of 59.7% in France.(Fernández-Fillol et al., 2021; Roland et al., 2024)

Natural disasters remain a significant trauma source in Indonesia. Rahmadian et al. (2016) reported a PTSD prevalence of 19.9% among children and adolescents affected by disasters, while Santiago et al. (2013) reported lower PTSD prevalence following natural and technological disasters (10–16%) compared with intentional trauma (26%).(Ahmad Ali Rahmadian et al., 2016; Santiago et al., 2013)

Clinically, these findings emphasize the importance of comprehensive trauma assessment in PTSD evaluation. Interpersonal trauma requires different therapeutic approaches compared with non-interpersonal trauma. Trauma-focused therapies such as Cognitive Processing Therapy and Eye Movement Desensitization and Reprocessing (EMDR) have demonstrated superior effectiveness in survivors of sexual and interpersonal violence. Accurate trauma identification enables clinicians to tailor treatment strategies more effectively.(Cannon et al., 2024)

CONCLUSION

This study provides a comprehensive description of the characteristics of patients with Post Traumatic Stress Disorder (PTSD) treated at Ibnu Sina Makassar Teaching Hospital during the period of September 2024 to September 2025. The findings indicate that PTSD predominantly affected individuals in the productive age group, particularly those aged 19–39 years, with a substantial proportion also observed among adolescents. Female patients were more frequently affected than males, reflecting well-established global epidemiological patterns. Most patients had a senior high school educational background and were predominantly students or employed individuals, highlighting the significant impact of PTSD on populations actively engaged in education and the workforce. Interpersonal conflict and physical violence emerged as the most common types of traumatic exposure, emphasizing the prominent role of interpersonal trauma in the development of PTSD in this clinical setting. Intrusive symptoms were the most frequently reported PTSD symptom cluster, followed by negative alterations in mood and cognition and arousal-related symptoms. These findings underscore the importance of early detection and targeted intervention for PTSD, particularly among young adults, adolescents, and women. The prominence of interpersonal trauma highlights the need for comprehensive trauma assessment and the implementation of trauma-focused, gender-sensitive therapeutic approaches. Additionally, integrating psychosocial support and vocational rehabilitation into PTSD management may help mitigate functional impairment and socioeconomic consequences. Overall, this study contributes valuable local epidemiological data that can inform clinical practice, mental health service planning, and future research on PTSD in Indonesia. Further multicenter and longitudinal studies are recommended to better understand causal relationships, treatment outcomes, and strategies for preventing PTSD and its recurrence.

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