

ORIGINAL ARTICLE

Factors Associated with Delayed Presentation Among Patients with First-Episode Psychosis in Bangladesh

Shah Mohammad Ashek Uddin Bhuiyan^{1*}, Mahbuba Akhter Jahan², Md Kamurul Hassan³

Received: 24 August 2026
Accepted: 1 September 2026
Published Online: 3 September 2026

Published by:
Gopalganj Medical College, Gopalganj,
Bangladesh

*Corresponding Author

DOI:

Copyright © 2026 The Insight



This article is licensed under a Creative Commons Attribution 4.0 International License.



ABSTRACT

Introduction: First-episode psychosis is a critical stage in the course of psychotic disorders, and timely initiation of treatment is associated with better clinical and functional outcomes. In Bangladesh, evidence regarding the determinants of delayed presentation in first-episode psychosis remains limited. Therefore, this study aims to assess the factors associated with delayed presentation among patients with first-episode psychosis in Bangladesh. **Methods & Materials:** This observational analytical cross-sectional study was conducted among patients with first-episode psychosis attending the Department of Psychiatry in Combined Military Hospital, Dhaka, Bangladesh, from January 2022 to December 2022. A total of 104 patients fulfilling the diagnostic criteria for first-episode psychosis were included using purposive sampling. Data were analyzed using SPSS version 26.0. **Results:** 64 (61.5%) had delayed presentation to psychiatric services, with a median duration of untreated psychosis of 9 months (IQR 4–16 months). Most patients were 25–34 years old (44.2%), male (59.6%), from rural areas (63.5%), and had schizophrenia-spectrum disorders (71.2%). Traditional or religious healers were the most common first source of help (40.4%), while stigma (34.6%) and lack of awareness (28.8%) were the leading perceived barriers. Delayed presentation was significantly associated with rural residence (75.8% vs 36.8%, $p=0.001$), primary or lower education (76.5%, $p=0.015$), unemployment (73.1%, $p=0.026$), insidious onset of symptoms (85.0%, $p<0.001$), first consultation with traditional or religious healers (81.0%, $p<0.001$), and perceived stigma (83.3% vs 50.0%, $p=0.002$), whereas substance use showed no significant association ($p=0.397$). **Conclusion:** This study found that delayed presentation was frequent among patients with first-episode psychosis in Bangladesh, with almost two-thirds not receiving treatment within six months of symptom onset. Longer delays were significantly linked to rural residence, lower levels of education, unemployment, gradual onset of symptoms, first seeking care from traditional or religious healers, and the presence of stigma related to mental illness.

Keywords: First-Episode Psychosis, Factors, Delayed Presentation

(The Insight 2026; 9(3): 784-789)

1. Classified Specialist, Department of Psychiatry, Combined Military Hospital, Dhaka, Bangladesh (ORCID: 0009-0006-2573-8708)
2. Assistant Registrar, Department of Obstetrics & Gynaecology, Mugda Medical College Hospital, Dhaka, Bangladesh
3. Specialist & Head, Department of Psychiatry, Combined Military Hospital, Jashore, Bangladesh

INTRODUCTION

Psychotic disorders are among the most disabling psychiatric conditions worldwide, with the first episode of psychosis (FEP) commonly emerging between 15 and 30 years of age, a period critical for education, employment, and social development [1]. Early treatment has consistently been associated with better symptomatic recovery, improved functional outcomes, reduced relapse, and lower long-term disability [2]. The concept of duration of untreated psychosis (DUP), defined as the interval between the onset of psychotic symptoms and initiation of adequate antipsychotic treatment, has therefore become a central indicator of quality of care in early psychosis services. A large meta-analysis of 33 studies involving more than 8,000 patients demonstrated that longer DUP was significantly associated with poorer response to treatment, greater negative symptoms, and worse social functioning [3]. Another systematic review found that every additional delay in treatment reduced the likelihood of symptomatic remission and functional recovery [4]. The burden of psychotic disorders is substantial in low- and middle-income countries (LMICs), where mental health systems remain underdeveloped.

According to the World Health Organization, schizophrenia affects approximately 24 million people globally, and the majority of affected individuals live in LMICs where access to evidence-based care is limited [5]. In such settings, delayed presentation is often prolonged by poverty, stigma, inadequate awareness, and fragmented referral pathways. Bangladesh faces a particularly important mental health challenge. The National Mental Health Survey of Bangladesh 2018–19 reported that 18.7% of adults had a mental disorder, yet only 13.7% of affected individuals sought professional help. The treatment gap for mental disorders exceeded 90%, reflecting severe barriers to access [6]. Bangladesh has a critical shortage of mental health professionals; recent national estimates indicate fewer than 0.2 psychiatrists per 100,000 population, with most specialists concentrated in major urban centers [7]. Consequently, people with emerging psychosis in rural areas often experience substantial delays before reaching psychiatric services. Evidence from South Asia suggests that pathways to care for psychosis are frequently complex. Families commonly consult traditional, spiritual, or religious healers before seeking medical treatment, and multiple non-psychiatric contacts may

occur before referral to a psychiatrist [8]. In a systematic review of pathways to care in psychosis, contacts with informal providers were associated with longer DUP and delayed initiation of antipsychotic treatment [9]. Stigma also plays a major role; fear of social rejection, concerns about marriage prospects, and misconceptions about psychosis can discourage families from presenting early for psychiatric care [10]. Sociodemographic and clinical factors further influence delay. Studies have reported longer DUP among males, individuals with lower educational attainment, unemployed persons, those living in rural areas, and patients with insidious onset of symptoms. Poor family recognition of early psychotic symptoms, lack of social support, and financial constraints have also been identified as significant determinants of delayed treatment [9,10]. Despite the high burden of mental illness in Bangladesh, research specifically examining delayed presentation among patients with first-episode psychosis remains very limited. Most Bangladeshi studies have focused on prevalence, stigma, or general service utilization rather than quantifying the factors associated with delayed psychiatric presentation in FEP. Therefore, this study aims to assess the factors associated with delayed presentation among patients with first-episode psychosis in Bangladesh.

METHODS & MATERIALS

This observational analytical cross-sectional study was conducted among patients with first-episode psychosis attending the Department of Psychiatry in Combined Military Hospital, Dhaka, Bangladesh, from January 2022 to December 2022. A total of 104 patients fulfilling the diagnostic criteria for first-episode psychosis were included using purposive sampling after obtaining informed written consent. Patients

with a previous history of psychotic disorder, prior antipsychotic treatment for more than four weeks, severe cognitive impairment, or major neurological illness were excluded. Data were collected through face-to-face interviews using a structured pretested questionnaire and review of clinical records. Information regarding socio-demographic characteristics, type of psychosis, mode of onset, substance use, family history of mental illness, duration of untreated psychosis (DUP), first source of help sought, and perceived barriers to early psychiatric consultation was recorded. Delayed presentation was operationally defined as presentation to psychiatric services more than six months after the onset of psychotic symptoms, while presentation within six months was considered not delayed. Participants were categorized into two groups according to DUP: delayed presentation group (>6 months from symptom onset; n=64) and not delayed group (≤6 months; n=40). Data were analyzed using SPSS version 26.0. Descriptive statistics were expressed as frequency, percentage, mean ± standard deviation, and median with interquartile range as appropriate. Associations between delayed presentation and explanatory variables were assessed using the Chi-square test, and a p-value of <0.05 was considered statistically significant. Ethical clearance was obtained from the institutional review board.

RESULTS

The mean age of the participants was 29.8 ± 8.4 years, and the largest age group was 25–34 years (44.2%). Males constituted 59.6% of the sample. Most participants were unmarried (55.8%), lived in rural areas (63.5%), had secondary education (42.3%), and 50.0% were unemployed (Table I).

Table I: Socio-demographic characteristics of the study participants (n = 104)

Variable	Frequency (%)
Age group (years)	
15–24	28 (26.9)
25–34	46 (44.2)
35–44	22 (21.2)
≥45	8 (7.7)
Mean ± SD	29.8 ± 8.4
Sex	
Male	62 (59.6)
Female	42 (40.4)
Total	104 (100.0)
Marital status	
Unmarried	58 (55.8)
Married	42 (40.4)
Separated/Widowed	4 (3.8)
Total	104 (100.0)
Residence	
Urban	38 (36.5)
Rural	66 (63.5)
Total	104 (100.0)
Education	
Primary or below	34 (32.7)
Secondary	44 (42.3)
Higher secondary or above	26 (25.0)
Total	104 (100.0)
Occupation	
Employed	32 (30.8)
Unemployed	52 (50.0)
Student	20 (19.2)
Total	104 (100.0)

Schizophrenia-spectrum disorders accounted for 71.2% of cases. An insidious onset was observed in 38.5% of patients. The median DUP was 9 months (IQR 4–16 months), and 61.5%

of patients remained untreated for more than 6 months (*Table II*).

Table II: Clinical characteristics and duration of untreated psychosis (*n* = 104)

Variable	Frequency (%)
Type of psychosis	
Schizophrenia spectrum	74 (71.2)
Brief psychotic disorder	14 (13.5)
Mania with psychotic features	10 (9.6)
Other psychotic disorders	6 (5.7)
Total	104 (100.0)
Mode of onset	
Acute (<1 month)	36 (34.6)
Subacute (1–6 months)	28 (26.9)
Insidious (>6 months)	40 (38.5)
Total	104 (100.0)
Substance use history	
Yes	24 (23.1)
No	80 (76.9)
Total	104 (100.0)
Family history of mental illness	
Yes	18 (17.3)
No	86 (82.7)
Total	104 (100.0)
Duration of untreated psychosis (DUP)	
<3 months	22 (21.2)
3–6 months	18 (17.3)
7–12 months	30 (28.8)
12 months	34 (32.7)
Median (IQR)	9 (4–16) months

The most common first contact was with traditional or religious healers (40.4%), while only 19.2% initially consulted a psychiatrist. The leading perceived barriers were stigma

(34.6%) and lack of awareness (28.8%), followed by financial constraints (19.2%) *Table III*.

Table III: Pathways to care and perceived barriers to early psychiatric consultation (*n* = 104)

Variable	Frequency (%)
First help sought from	
Traditional/Religious healer	42 (40.4)
General physician	34 (32.7)
Psychiatrist	20 (19.2)
Other	8 (7.7)
Total	104 (100.0)
Main perceived barrier*	
Stigma/fear of social consequences	36 (34.6)
Lack of awareness of mental illness	30 (28.8)
Financial constraints	20 (19.2)
Distance/transportation difficulty	12 (11.5)
Family refusal or delay	6 (5.8)
Total	104 (100.0)

*Participants were asked to identify the single most important barrier responsible for delaying psychiatric consultation. Patients from both groups had barriers.

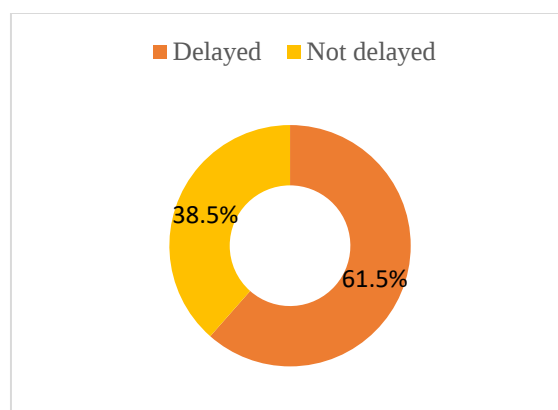


Figure 1: Pie chart showing incidence of delayed and not delayed presentation (n=104)

Delayed presentation was significantly more common among rural residents (75.8% vs 36.8%, $p=0.001$), participants with primary or lower education (76.5%, $p=0.015$), and the

unemployed (73.1%, $p=0.026$). Sex was not significantly associated with delay ($p=0.166$) (Table IV).

Table IV: Association between socio-demographic factors and delayed presentation (>6 months) (n = 104)

Variable	Delayed n=64 (%)	Not delayed n=40 (%)	p value*
Sex			0.166
Male (n=62)	42 (67.7)	20 (32.3)	
Female (n=42)	22 (52.4)	20 (47.6)	
Residence			0.001
Rural (n=66)	50 (75.8)	16 (24.2)	
Urban (n=38)	14 (36.8)	24 (63.2)	
Education			0.015
Primary or below (n=34)	26 (76.5)	8 (23.5)	
Secondary (n=44)	28 (63.6)	16 (36.4)	
Higher secondary+ (n=26)	10 (38.5)	16 (61.5)	
Occupation			0.026
Unemployed (n=52)	38 (73.1)	14 (26.9)	
Employed (n=32)	16 (50.0)	16 (50.0)	
Student (n=20)	10 (50.0)	10 (50.0)	

*Chi-square test

An insidious onset was strongly associated with delayed presentation (85.0%, $p<0.001$). Patients who first sought help from traditional or religious healers had a markedly higher delay (81.0%, $p<0.001$). Reporting stigma as a barrier was also

significantly associated with delayed presentation (83.3% vs 50.0%, $p=0.002$). Substance use was not significantly associated with delay ($p=0.397$) (Table V).

Table V: Association between clinical and pathway factors with delayed presentation (>6 months) (n = 104)

Variable	Delayed n (%)	Not delayed n (%)	p value*
Mode of onset			<0.001
Acute (n=36)	14 (38.9)	22 (61.1)	
Subacute (n=28)	16 (57.1)	12 (42.9)	
Insidious (n=40)	34 (85.0)	6 (15.0)	
Substance use			0.397
Yes (n=24)	17 (70.8)	7 (29.2)	
No (n=80)	47 (58.8)	33 (41.2)	
First help sought			<0.001
Traditional/Religious healer (n=42)	34 (81.0)	8 (19.0)	
General physician (n=34)	20 (58.8)	14 (41.2)	
Psychiatrist (n=20)	6 (30.0)	14 (70.0)	
Other (n=8)	4 (50.0)	4 (50.0)	
Stigma reported as barrier			0.002
Yes (n=36)	30 (83.3)	6 (16.7)	
No (n=68)	34 (50.0)	34 (50.0)	

*Chi-square test

DISCUSSION

In this study, the mean age of participants was 29.8 ± 8.4 years, with the largest group aged 25–34 years (44.2%); males accounted for 59.6%, and 63.5% were from rural areas. This young-adult predominance is typical for first-episode psychosis (FEP), and the rural skew is important in Bangladesh, where mental health services are still concentrated in large cities and remain weak at the primary-care level. Hossain et al. reported that mental disorders in Bangladesh are common, with adult prevalence ranging from 6.5% to 31.0%, and they emphasized that specialist care is concentrated in tertiary hospitals in big cities, with little presence in primary care [7]. The WHO report similarly noted a 92.3% treatment gap, with only 7.7% of adults with mental disorders receiving treatment, and highlighted that specialist services are heavily urban-centered [11]. Clinically, 71.2% of the patients had schizophrenia-spectrum disorders, 38.5% had an insidious onset, and the median duration of untreated psychosis (DUP) was 9 months (IQR 4–16); 61.5% remained untreated for more than 6 months. Penttilä et al. showed that longer DUP is a modifiable prognostic factor and is linked with poorer long-term outcome in schizophrenia [3]. In an Eastern Nepal FEP study, Limbu et al. reported a mean DUP of 21.4 months and a median DUP of 3.0 months, and found that insidious onset and unemployment were associated with longer DUP [12]. Compared with that study, the median DUP of 9 months is still prolonged in this study and supports a substantial delay in the pathway to care in Bangladesh. The pathway-to-care findings were also striking. In this study, the first help sought was from traditional/religious healers in 40.4%, followed by general physicians in 32.7%, while only 19.2% first consulted a psychiatrist. The main perceived barriers were stigma/fear of social consequences (34.6%), lack of awareness (28.8%), and financial constraints (19.2%). Khemani et al. in South India reported that the first point of contact was a traditional healer in 34.7% and psychiatric services in 50% of patients with severe mental disorders [13]. MacDonald et al. found that in Chennai, almost 25% of first contacts were with traditional or faith healers [14]. Cabassa et al. reported that stigma was reported by 60% of participants and played an important role in delays to care [15]. This study's findings closely follow these South Asian patterns, showing that informal care, low mental-health literacy, and stigma remain major contributors to delayed psychiatric presentation. The association tables further clarify the delay pattern. Delayed presentation was significantly higher among rural residents (75.8% vs 36.8%, $p=0.001$), those with primary education or below (76.5%, $p=0.015$), and the unemployed (73.1%, $p=0.026$). These gradients are consistent with the Bangladesh mental-health system context, where services are urban concentrated and access barriers are pronounced for poorer and less educated families [5,7]. In this study, delayed presentation was most common with insidious onset (85.0%), first help from traditional/religious healers (81.0%), and stigma as a barrier (83.3%), while substance use was not significant ($p=0.397$). This aligns with the Nepal study, where insidious onset and unemployment prolonged DUP, and with South Asian pathway studies showing that informal help-seeking and stigma are key drivers of delay [12–15].

LIMITATIONS

The study was conducted in a single hospital with a small sample size. So, the results may not represent the whole community. Information on the onset of psychotic symptoms and help-seeking pathways relied partly on patient and family recall, introducing the possibility of recall bias.

CONCLUSION

This study demonstrated that delayed presentation was common among patients with first-episode psychosis in Bangladesh, with nearly two-thirds remaining untreated for more than six months after symptom onset. Delayed presentation was significantly associated with rural residence, lower educational attainment, unemployment, insidious onset of symptoms, initial help-seeking from traditional or religious healers, and perceived stigma.

RECOMMENDATIONS

Community mental health awareness programs should particularly address rural populations, individuals with low educational attainment, and unemployed persons. Public education campaigns are needed to improve recognition of insidious early symptoms of psychosis and to reduce stigma related to mental illness. Further multicenter analytical studies with larger sample sizes are recommended to confirm these findings.

FUNDING

No funding sources

CONFLICT OF INTEREST

None declared

ETHICAL APPROVAL

The study was approved by the Institutional Ethics Committee

REFERENCES

- McGorry PD, Mei C. Early intervention in youth mental health: progress and future directions. *Evidence Based Mental Health*. 2018 Nov;21(4):182-4.
- Correll CU, Galling B, Pawar A, Krivko A, Bonetto C, Ruggeri M, Craig TJ, Nordentoft M, Srihari VH, Guloksuz S, Hui CL. Comparison of early intervention services vs treatment as usual for early-phase psychosis: a systematic review, meta-analysis, and meta-regression. *JAMA Psychiatry*. 2018 Jun;75(6):555-65.
- Penttilä M, Jääskeläinen E, Hirvonen N, Isohanni M, Miettinen J. Duration of untreated psychosis as predictor of long-term outcome in schizophrenia: systematic review and meta-analysis. *The British Journal of Psychiatry*. 2014 Aug;205(2):88-94.
- Talbott JA. Five-Year Follow-up of a Randomized Multicenter Trial of Intensive Early Intervention vs Standard Treatment for Patients With a First Episode of Psychotic Illness: The OPUS Trial. *Year Book of Psychiatry & Applied Mental Health*. 2009;2009:150-1.
- World Health Organization. WHO European framework for action on mental health 2021–2025. World Health Organization. Regional Office for Europe; 2022 Mar 21.
- Huque R, Azad AK, Islam K, Ahmed HU, Amin MR. Care-seeking behavior and treatment gap for mental health conditions in Bangladesh: Evidence from the national mental health survey 2019.
- Hossain MD, Ahmed HU, Chowdhury WA, Niessen LW, Alam DS. Mental disorders in Bangladesh: a systematic review. *BMC Psychiatry*. 2014 Jul 30;14(1):216.
- Mihai A, Jordanova V, Volpe U, Sartorius N. Evaluating mental healthcare systems by studying pathways to care. *Psychiatry in Practice: Education, Experience, and Expertise*. 2016 Mar 3:23-32.
- Anderson KK, Fuhrer R, Malla AK. The pathways to mental health care of first-episode psychosis patients: a systematic review. *Psychological Medicine*. 2010 Oct;40(10):1585-97.
- Clement S, Schauman O, Graham T, Maggioni F, Evans-Lacko S, Bezborodovs N, Morgan C, Rüsch N, Brown JS, Thornicroft G. What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine*. 2015 Jan;45(1):11-27.
- Kemp CG, Concepcion T, Ahmed HU, Anwar N, Baingana F, Bennett IM, Bruni A, Chisholm D, Dawani H, Erazo M, Hossain SW. Baseline situational analysis in Bangladesh, Jordan, Paraguay, the

- Philippines, Ukraine, and Zimbabwe for the WHO special initiative for mental health: Universal health coverage for mental health. PLOS ONE. 2022 Mar 22;17(3):e0265570.*
12. Limbu S, Nepal S, Mishra SK. Duration of untreated psychosis and associated sociodemographic and clinical factors in first-episode psychosis: A study from eastern Nepal. *The International Journal of Psychiatry in Medicine. 2025 Jan;60(1):57-70.*
 13. Khemani MC, Premarajan KC, Menon V, Olickal JJ, Vijayageetha M, Chinnakali P. Pathways to care among patients with severe mental disorders attending a tertiary health-care facility in Puducherry, South India. *Indian journal of psychiatry. 2020 Dec 12;62(6):664.*
 14. MacDonald K, Mohan G, Pawliuk N, Joobor R, Padmavati R, Rangaswamy T, Malla A, Iyer SN. Comparing treatment delays and pathways to early intervention services for psychosis in urban settings in India and Canada. *Social psychiatry and psychiatric epidemiology. 2023 Apr;58(4):547-58.*
 15. Cabassa LJ, Piscitelli S, Haselden M, Lee RJ, Essock SM, Dixon LB. Understanding pathways to care of individuals entering a specialized early intervention service for first-episode psychosis. *Psychiatric Services. 2018 Jun 1;69(6):648-56.*