Late-Onset First-Episode Psychosis: Does It Have a Better Outcome?

Nuno A. Fernandes, MD[a,*]; Marisa A. Martins, MD[a]; Ricardo F. Gasparinho, MD[a]; Liliana P. Ferreira, MD[a]; Núria F. Santos, MD[a]; António P. Alho, MD[a]; and Inês S. Fernandes, MD[a]

The age at onset of psychosis is an important clinical marker associated with the course and outcome of psychotic disorders.[1] Although schizophrenia most commonly presents early in life, 23% of patients have onset after the age of 40 years.[2–5] There are well-established differences between late-onset psychosis (≥ 40 years and < 60 years) and early-onset psychosis (<40 years).[1,4] Previous studies found that patients with late-onset psychosis had better outcomes than those with early onset.[6] This study aimed to characterize demographic and clinical data of patients with late-onset psychosis and to compare first-episode psychosis outcomes between late-onset and early-onset patients.

METHODS

This was a cohort study of all inpatients with first-episode psychosis aged 18–59 years at Hospital Distrital de Santarém from 2014 to 2016. All data were collected during hospital admission and at 9-month follow-up. Patients were classified according to age at onset of psychotic symptoms: early onset and late onset. *ICD-10* diagnoses[7] at 9-month follow-up were confirmed and further clustered into diagnostic categories: nonaffective psychosis, affective psychosis, and drug-induced psychotic disorder.

RESULTS

Of the 66 patients with first-episode psychosis, 39.4% were late onset (Table 1), and 61.5% were women (odds ratio [OR] = 3.733; 95% CI, 1.320–10.562; $P = .011$). The most frequent diagnoses were nonaffective psychosis (46.2%) and affective psychosis (46.2%), followed by drug-induced psychotic disorder (7.1%). The mean ± SD duration of untreated psychosis in patients with late-onset psychosis was 18.88 ± 41.22 months, and none reported cannabis use during follow-up.

During 9-month follow-up, late-onset psychosis patients had a lower outpatient follow-up dropout rate (OR = 3.667; 95% CI, 1.062–12.658; $P = .033$) compared to those with early onset, but there were no significant differences in dosage of neuroleptics required, in mean number of days spent in the hospital, in inpatient hospital readmissions, or in occupational outcomes.

In the late-onset group only, a longer duration of psychosis (> 1 year) was significantly associated with longer hospitalization (21.25 ± 1.258 days, $P = .011$) and worse occupational outcome, namely no return to work after first-episode psychosis (estimated risk = 4.2; 95% CI, 1.954–9.027; $P = .002$).

DISCUSSION

In our study, of the total sample with first-episode psychosis, 39.4% had a late onset, which is a percentage higher than the 23% found in previous studies.[2–5] Also, 46.2% of those late-onset psychosis patients had a mood disorder, contrary to other studies wherein the majority of the patients had a broad schizophrenia disorder.[8,9]

Sex differences have been previously documented with a later life peak in incidence of first-episode psychosis in women.[2,3,6] We found a similar statistically significant result in our study, with a female prevalence in patients with late-onset psychosis.

Cannabis use and psychosis can occur at any age, but in our study, there was a low rate of drug-related cases. Cannabis use is a risk factor associated with worse outcome in first-episode psychosis, with adverse effects in psychopathology and a negative impact on neurocognition, and continued cannabis use after the onset of psychosis is associated with increased risk of illness relapse, longer hospitalizations, and more severe positive psychopathology.[10] In our study, we did not find this association, and there were other relevant factors with a major impact in late-onset psychosis outcome, such as longer duration of psychosis. The late-onset group outcomes were similar to those of the early-onset group, like in the study by Lappin et al.[9]

Unlike other studies,[2,9] we verified that long duration of psychosis (> 1 year) is similar in late-onset and early-onset patients. Duration of psychosis is considered a predictor

[a]Department of Psychiatry and Mental Health, Hospital Distrital de Santarém, Santarém, Portugal

*Corresponding author: Nuno A. Fernandes, MD, Department of Psychiatry and Mental Health, Hospital Distrital de Santarém, EPE, Avenida Bernardo Santareno 3737B, 2005-177 Santarém, Portugal (n.agostinho.fernandes@gmail.com).

Prim Care Companion CNS Disord 2022;24(4):21br03073

To cite: Fernandes NA, Martins MA, Gasparinho RF, et al. Late-onset first-episode psychosis: does it have a better outcome? *Prim Care Companion CNS Disord.* 2022;24(4):21br03073.

To share: https://doi.org/10.4088/PCC.21br03073

Table 1. Demographic and Clinical Characteristics of Patients With First-Episode Psychosis (N = 66)

Characteristic	Late Onset (aged 40–59 y)	Early Onset (aged < 40 y)	Odds Ratio	95% CI	*P* Value
Total	26 (39.4)	40 (60.6)			
Sex			3.733	1.320–10.562	*P* = .011*
Female	16 (61.5)	12 (30)			
Male	10 (38.5)	28 (70)			
Marital status					
Married	13 (50)	11 (27.5)			
Not married	13 (50)	29 (72.5)			
Psychosis diagnosis					
Nonaffective	12 (46.2)	25 (62.5)			
Affective	12 (46.2)	8 (20)			
Drug induced	2 (7.1)	7 (17.5)			
Duration of psychosis			1.333	0.322–5.526	*P* = .691
≤ 1 y	21 (84)	35 (87.5)			
> 1 y	4 (16)	5 (12.5)			
Duration of psychosis, mean ± SD, mo	18.9 ± 41.22	15.4 ± 55.73			

[a]Data are presented as n (%) unless otherwise specified.
*Comparison *P* value < .05.

of outcome, and longer duration has been associated with worse clinical and psychosocial outcomes.[11] We found the same relationship in late-onset psychosis patients. Longer duration of psychosis in late-onset patients was significantly associated with longer hospitalization and worse occupational outcome. We consider the long duration of psychosis in this group a challenge to how services are organized and a particular unmet need. It is important to develop specialized health care services for this group, and early intervention is a relevant goal to optimize social recovery and prevent future decline.

There is sufficient evidence to justify recognition of late-onset (onset after age 40 years) and very late-onset (onset after age 60 years) psychosis.[3] Patients with very late onset are more likely to have a different underlying pathology (ie, degenerative rather than neurodevelopmental).[3,12] Primary psychosis occurring after age 60 years (very late onset) may be associated with the process of dementia.[12]

CONCLUSION

In conclusion, patients with late-onset first-episode psychosis do not have a better functional outcome, and, in this group, longer duration of psychosis is associated with worse outcomes. Early intervention in psychosis is needed in older patients—not only in youth. Currently there is age and sex discrimination in early intervention models. Services in early intervention programs may need to be adjusted to meet the needs of older people. This intervention will be especially relevant to women, who on average present first-episode psychosis later.

Submitted: July 13, 2021; accepted November 4, 2021.
Published online: August 2, 2022.
Relevant financial relationships: None.
Funding/support: None.
Previous presentation: Poster presented at the XXII Curso Anual de Esquizofrenia; Madrid, Spain; November 23–25, 2017.

REFERENCES

1. Veru F, Jordan G, Joober R, et al. Adolescent vs adult onset of a first episode psychosis: impact on remission of positive and negative symptoms. *Schizophr Res*. 2016;174(1-3):183–188.
2. Selvendra A, Baetens D, Trauer T, et al. First episode psychosis in an adult area mental health service-a closer look at early and late-onset first episode psychosis. *Australas Psychiatry*. 2014;22(3):235–241.
3. Howard R, Rabins PV, Seeman MV, et al; The International Late-Onset Schizophrenia Group. Late-onset schizophrenia and very-late-onset schizophrenia-like psychosis: an international consensus. *Am J Psychiatry*. 2000;157(2):172–178.
4. Maglione JE, Thomas SE, Jeste DV. Late-onset schizophrenia: do recent studies support categorizing LOS as a subtype of schizophrenia? *Curr Opin Psychiatry*. 2014;27(3):173–178.
5. Reinhardt MM, Cohen CI. Late-life psychosis: diagnosis and treatment. *Curr Psychiatry Rep*. 2015;17(2):1.
6. Girard C, Simard M. Clinical characterization of late- and very late-onset first psychotic episode in psychiatric inpatients. *Am J Geriatr Psychiatry*. 2008;16(6):478–487.
7. *ICD-10* Version. 2016. Icd.who.int website. Accessed March 14, 2021. https://icd.who.int/browse10/2016/en
8. Greenfield P, Joshi S, Christian S, et al. First episode psychosis in the over 35 s: is there a role for early intervention? *Early Interv Psychiatry*. 2018;12(3):348–354.
9. Lappin JM, Heslin M, Jones PB, et al. Outcomes following first-episode psychosis: why we should intervene early in all ages, not only in youth. *Aust N Z J Psychiatry*. 2016;50(11):1055–1063.
10. Miller B. Novel insights on cannabis and psychosis. *Psychiatr Times*. 2020;37(7).
11. Primavera D, Bandecchi C, Lepori T, et al. Does duration of untreated psychosis predict very long term outcome of schizophrenic disorders? results of a retrospective study. *Ann Gen Psychiatry*. 2012;11(1):21.
12. Kwak Y, Yang Y, Koo M. Late-onset psychosis; is it real? *Dement Neurocognitive Disord*. 2015;14(1):1.