

# Is Major Depressive Disorder with Psychotic Features More Likely in Elderly Than Adulthood?

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## ÖZET:

Psikotik özellikli depresyon ileri yaşlarda yetişkinlikten daha mı sık görülüyor?

**Amaç:** Psikotik depresyon ileri yaş hastalar arasında sık görülmesine rağmen yapılan çalışmalarda psikotik ve psikotik olmayan hasta grupları arasında sosyodemografik özellikler açısından belirgin fark gösterilememiştir. Bu çalışmada psikotik olan ve olmayan depresyon hastalarının yaşlarının karşılaştırılması amaçlanmıştır. Çalışmanın hastalığın daha iyi anlaşılmasına ve yönetimine katkıda bulunabileceği düşünülmektedir.

**Yöntem:** Çalışmaya 25 psikotik depresyon 25 psikotik olmayan depresyon olmak üzere toplam 50 yatan depresyon hastası dahil edilmiştir. Hastaların tanısı iki psikiyatri uzmanının ortak kararıyla DSM-IV Eksen I Bozuklukları için Yapılandırılmış Klinik Görüşme (SCID-I) uygulanarak konulmuştur. Depresyon şiddeti Hamilton depresyon ölçeđi ve Hamilton anksiyete ölçeđi ile değerlendirilmiştir.

**Bulgular:** Psikotik depresyon hastalarının yaş ortalaması (46,6±15.4 yıl) psikotik olmayan hastaların yaş ortalamasından (35,1±15.2 yıl) anlamlı oranda yüksek saptanmıştır. Ayrıca, Hamilton depresyon ve Hamilton anksiyete ölçekleri psikotik depresyon grubunda daha yüksek bulunmuştur. Her iki grupta hastaların epizod sayıları ve hastalık süreleri arasında anlamlı fark bulunmamıştır.

**Sonuç:** Çalışmamızın bulguları psikotik özellikli depresyonun ileri yaşlarda daha sık görüldüğünü düşündürmektedir.

**Anahtar sözcükler:** psikotik depresyon, psikotik olmayan depresyon, erken başlangıç, geç başlangıç

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## ABSTRACT:

Is major depressive disorder with psychotic features more likely in elderly than adulthood?

**Objective:** Although psychotic depression is very common among old depressed patients, studies have generally failed to find any socio-demographic differences between psychotic depressed patients and non-psychotic patients. Comparison of the age related factors in psychotic depression and non-psychotic depression patients could contribute to a better understanding of the clinical features of psychotic depression and its management.

**Method:** The sample comprised of 50 inpatients; 25 of them major depressive disorder with psychotic features, and the other 25 major depressive disorder without psychotic features. The diagnosis made after consensus of two psychiatrists by Structured Clinical Interview for DSM-IV Axis I Disorder (SCID-IV). The severity of depression measured with the Hamilton Depression Rating Scale (HDRS), and concomitantly Hamilton Anxiety Rating Scale (HARS) were performed.

**Results:** The average age of the patients with psychotic depression (46,6±15.4 years) was higher than that of non-psychotic depressed patients (35,1±15.2 years). Also, patients with psychotic depression had higher mean of total HDRS and HARS scores. There were no significant differences between the patient groups in number of episodes and duration of illness.

**Conclusion:** These findings suggest that major depressive disorder with psychotic features is more likely in elderly than adulthood.

**Key words:** psychotic depression, non-psychotic depression, early-onset, late-onset

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## INTRODUCTION

Psychotic depression is more severe form of depression, which is characterized by usually consistent of non-bizarre nihilistic, somatic, or guilty delusional beliefs and less often hallucinations (1). Several studies have suggested that psychotic depression and non-psychotic depression are very distinct syndromes (2-4). This distinction has arisen from clinical presentation, treatment strategies, familial pattern, and biological features (4). Psychotic depression patients often have longer duration of episodes, increased psychomotor disturbances, higher levels of anxiety, more likely to commit suicide, poorer outcome, more impaired cognitive function and greater hypothalamo-pituitary-adrenal axis abnormalities (2,5). In addition, some comparative studies have reported poorer social and occupational functioning, higher relapse and recurrence frequencies, and later age of onset in psychotic depression (2). Previous studies comparing young adults with older adults have investigated the interaction of age and depression. There is no consensus between studies since the results are inconsistent. Some research have reported that symptoms such as withdrawal, apathy, lack of interest, lack of drive, suicidality, and guilt psychomotor activity, agitation were more often observed in the older patients than younger patients (8,9). In a metaanalysis, the phenomenology and clinical features of late-onset depression differ only in a few parts from early-onset depression. Elderly depressed patients showed more agitation, multiple somatic symptoms and hypochondriasis, but less guilt and sexual desire compared with younger depressed adults. There were no significant differences between these groups based on late insomnia, somatic anxiety and suicidality, which might be due to the small numbers of participants (10). Another study found that elderly patients were more likely to have agitation and late insomnia, whereas younger individuals were more likely to have increased appetite, weight gain and decreased libido (11). On the other hand, other researchers have found that agitation and psychotic symptoms were less common in older patients with depression. Blazer et. al. (1987) did not find depressive symptom differences among hospitalized patients across different age groups (15). Similarly, Stage et al. (2001) did not find any clinically significant differences in symptomatology between younger and elderly depressed patients (8). They suggest that age seems to have no effect on the depression diagnosis. Baldwin 1995 (16) and Krishnan et

al. (1995) reported that late-onset depression and early-onset depression are phenomenologically similar (17). Corruble et al. (2008) assessed symptom profiles between patients with a first episode of major depression (18). Their main result was that there were many similarities in symptom patterns between the early-onset (18-59 years old), late-onset (60-74 years old), and later late-onset (75 years of age and older).

Although studies have generally failed to find any socio-demographic differences between psychotic depressed patients and non-psychotic patients, psychotic depression manifests heterogeneity in regards to the age onset. Results of the few studies showing certain demographic differences suggested that the onset of the psychotic depression was later than non-psychotic depression (2,5,7,19). Psychotic depression is very common among older depressed patients (2). It has also been reported that one half of patients with major depression that begins after age 60 had nihilistic, somatic, guilty, or persecutory delusions (19).

In this study, we hypothesized that the onset of the psychotic depression is later than non-psychotic depression. A comparison of the age related factors of psychotic depression and non-psychotic depression could contribute to a better understanding of the clinical features of psychotic depression and its management as well.

## PATIENTS AND METHODS

The sample comprised of 50 inpatients; 25 major depressive disorder with psychotic features, (fifteen women, ten men, mean age=46.6 years, SD=15.4, range=17-71) and 25 major depressive disorder without psychotic features (sixteen women, nine men, mean age=35.1 years, SD=15.2, range=19-71) who were consecutively admitted to the at Yuzuncu Yil University, Dursun Odabas Medical Center, Department of Psychiatry between May 2012 and December 2013. The study was approved by the university ethics committee. The diagnosis made after consensus of two psychiatrists by means of Structured Clinical Interview for DSM-IV Axis I Disorder (SCID-IV). The severity of depression was measured by using the Hamilton Depression Rating Scale (HDRS), 17 items, and also concomitantly Hamilton Anxiety Rating Scale (HARS) was performed. All patients underwent a detailed psychosocial and clinical evaluation including neurological examination in order to exclude

**Table 1: Descriptive statistics and comparison results of psychotic and non-psychotic depressives**

	Psychotic group (n=25) Mean±SD	Non-psychotic group (n=25) Mean±SD	Analysis	
Mean Age	46.6±15.4	35.1±15.2	t=4.426	p=0.010
Duration of illness(months)	57.7±85.9	56.4±75.9	z=-0.585	p=0.558
Total HDRS score	33.4±5.5	26.6±4.1	t=7.288	p=0.001
Total HARS score	24.5±6.1	18.5±4.8	t=3.051	p=0.005
Total number of depressive Episodes	2.7±2.0	2.7±1.4	z=-1.288	p=0.198
Gender: Male/female	10/15	9/16	$\chi^2=0.08$	p=0.771
Suicide attempt: Yes/No	7/18	4/21	$\chi^2=1.08$	p=0.301
Family history: Yes/No	7/18	11/14	$\chi^2=1.44$	p=0.232
Psychosocial stress: Yes/No	11/14	7/18	$\chi^2=1.44$	p=0.232

HDRS: Hamilton Depression Rating Scale, HARS: Hamilton Anxiety Rating Scale

primary medical conditions. Patients diagnosed with schizophrenia, schizoaffective disorder, bipolar disorder, or neurological diseases were excluded.

### Statistical Analysis

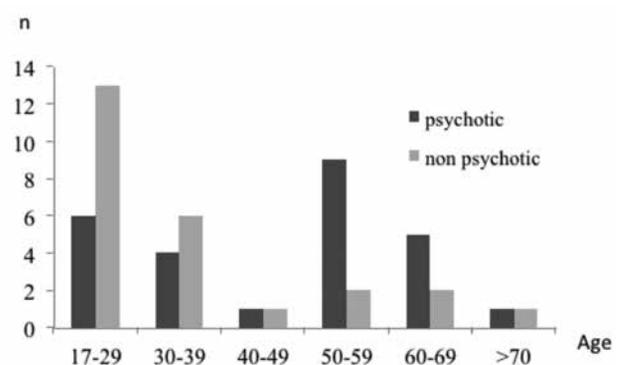
Descriptive statistics for continuous variables (characteristics) were presented as mean, standard deviation, minimum and maximum values. Student t test and Mann Whitney U test were used to compare non-psychotic and psychotic group means for the studied variables. Chi-square test was carried out to examine relationships between group and categorical variables. Statistical significant level was considered as  $p < 0.05$ . The SPSS (ver. 13) statistical program was used for all statistical tests.

## RESULTS

In the psychotic depressed group, eight patients (32%) had nihilistic delusions, eight (32%) had persecutory, five (20%) had guilty, two (8%) had both nihilistic and persecutory, two patient (8%) had guilty and persecutory delusions, five patients (20%) had auditory hallucinations, and also two of them were mood-incongruent. Three patients with psychotic depression had diabetes mellitus, three had hypertension, and two had chronic obstructive pulmonary disease. One patient with non-psychotic depression (age 63) was diagnosed with benign prostatic hyperplasia.

The mean age, the mean HDRS and HARS scores, number of depressive episodes, and mean illness duration (months) of the patients were presented in Table 1. The patients with psychotic depression had older age ( $p = 0.010$ ), higher the mean of total HDRS ( $p = 0.001$ ), and HARS scores ( $p = 0.005$ )

compared to the non-psychotic depression group. There were no statistically significant differences between the two groups in the duration of illness as well as the number of illness episodes. Also, no significant differences were observed in gender, suicide attempts, family history, and stressful life events between the two groups as shown in Table 1. Ten males (40%) and fifteen females (60%) had psychotic depression; nine males (36%) and sixteen females (64%) had non-psychotic depression. Seven patients with psychotic depression (28%) and four patients (16%) with non-psychotic depression had suicide attempt during the current episode. Family history of patients with non-psychotic depression and stressful life events of patients with psychotic depression were higher, but not significantly different. Seven psychotic (28%) and eleven non-psychotic (44%) depressed patients reported a positive family history of depression. Stressful life events were associated with the onset of episodes of eleven psychotic (44%) and seven non-psychotic (28%) patients with depression. The age distribution was illustrated in Figure 1.



**Figure 1: The age distribution of the sample**  
n: Number of patients

## DISCUSSION

In this study, the patients with psychotic depression had older age, higher HDRS and HARS scores than patients with non-psychotic depression. Moreover, there were no significant differences between the patient groups in number of episodes and duration of illness. These findings suggest that major depressive disorder with psychotic features is more likely in elderly than adulthood.

Our results are consistent with a number of studies documenting that the psychotic symptoms were described as distinguishing features in elderly patients with depression. Meyers and Greenberg (1986) found an association between increased age at onset of depression and psychotic features (20). In elderly sample, the average age at onset of psychotic depression (62.4 years) was significantly higher than non-psychotic depression (51.5 years). Age related biological and psychological factors might be related to a different presentation of major depression (10). It has been reported that elderly patients are more susceptible to confusion, disorientation, agitation, and psychotic symptoms. Clinical differences between late and early-onset depression may reflect underlying etiologic heterogeneity (21). Brodaty et al. (1997) reported that elderly depressed patients with a late-onset (after 60 years) had severe psychomotor disturbance, higher HDRS scores, rates of psychotic and melancholic features than elderly depressed patients with an early onset (before the age of 60 years) (22). However, prevalence of psychotic or melancholic depression did not differ statistically between patients with late and early-onset of depression. The authors argued that there are phenomenological differences between older and younger patients with depression. Kessing (2006) found that patients with late onset depression (age >65 years) were more often women, had more severe forms of depression, and had more frequent psychotic symptoms compared to patients with early onset (age <65 years), in both inpatients and outpatients (21).

A few studies suggest that first degree relatives of patients with psychotic depression have elevated rates of major depressive disorders. Leckman et al. (1984) investigated lifetime rates of depression among first-degree relatives of depressive subtypes including endogenous, melancholic, autonomous, and delusional (23). Rates of major depressive disorder were the highest

among the first-degree relatives of patients who had the autonomous and delusional subtypes, and while lower for the relatives of endogenous and melancholic patients. In our sample, patients with non-psychotic depression reported higher rates of positive family history (eleven patients) than patients with psychotic depression (seven patients), but not significantly different. Similarly, Alexopoulos et al (1988) found increased rates of family history of mood disorders in patients with early-onset depression compared to late-onset depression (24).

Some studies have shown that patients with psychotic depression have higher rates of relapse and recurrence. Therefore, they have increased psychiatric hospitalization, poorer response to standard treatments, greater disabilities and poorer clinical course, although not all studies are in agreement (25,26). We have found that there is no significant difference in number of episodes between patients with psychotic and non-psychotic depression. Moreover, Holroyd and Duryee reported that early-onset patients had higher numbers of depressive episodes than late-onset patients. The authors argued that it might be linked to familial and genetic factors (27).

Another important topic is suicide in patients with psychotic depression. Psychotic depression is associated with an increased risk of suicide attempts compared with non-psychotic depression (2). In the epidemiologic Catchment Area Study, patients with psychotic depression had a higher rate of attempted suicides and lifetime number of hospitalizations than non-psychotic depressed patients. A 25-year retrospective analysis of suicides in hospitalized patients with major depression demonstrated that patients with psychotic features were five times more likely to commit suicide than those without psychotic symptoms (31). In addition, suicide rates are more common among older people than general population (32). In this study, number of patients with psychotic depression who have attempted suicide (seven patients, 28%) were greater than patients with non-psychotic depression (four patients, 16%), but not significantly different. This finding may be due to our sample size.

This study has some limitations. Because the number of patients is small, our findings can be reexamined in more representative samples. Finally, research design of this study is cross sectional. Probably, different results would have been obtained if the design of this study had been longitudinal.

## CONCLUSION

The purpose of this study was to compare the age of the psychotic and non-psychotic depression. Our results suggest that psychotic depression is more common among older

people than younger people. This relation requires further research.

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