

## Follow up of late onset psychosis

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### ABSTRACT

This study was done to understand various factors influencing the compliance, outcome and follow up of patients with late onset psychosis (LOP- Age of onset > 60years). The emergence of psychotic symptoms for the first time in later life poses a diagnostic challenge for clinicians assessing and treating elderly persons with mental illness. Late or very late onset psychosis (LOP) has not been well studied and various treatment issues remain unresolved. The incidence of psychosis increases with age with no. of factors leading to increase in vulnerability and expression. This article reviews various factors influencing the follow up. In this study we reviewed all the charts of the patients diagnosed as late onset psychosis (age>60years) {ICD 10 category of F20-29}, evaluated in psychiatric services of CIMS treated both in OP care and IP care. Patients were reviewed between the time period of December 2015 to December 2017 (2 years) and followed up. Relevant sociodemographic and clinical variables like compliance, number of follow ups were collected, coded, entered and analyzed. 36 patients met the criteria and they were systematically analyzed. A total of 36 patients with late onset psychosis presented with mean age of 71.6 years of which 47.2 were females. Paranoid schizophrenia was the commonest type of psychosis (44.4%). 41.6% had good compliance. 38.89% did not come for follow up. It was observed, literates had come for more no. of follow ups. Interestingly, illiterates [n=18] had a better compliance [n=7]. It was also observed that patients with shorter duration of illness [n=7] had a good compliance. Quetiapine had a better compliance (16.6%) with maximum response (13.89%). It is observed that follow up is poor even in severe mental illness like LOP. Social factors like literacy and socioeconomic status seemed to influence follow up. Social factors and type of drugs seemed to influence compliance. Clinical improvement was good with quetiapine and resperidone. Efforts to improve follow up and compliance should be made even in the first contact especially in poor and illiterate patients. Quetiapine may be the drug of choice in LOP to enhance compliance and improvement. Though psychosis is becoming more common in elderly, compliance still remains an issue with good compliance being less than 50% and majority of them never turned up for follow up. Compliance can be improved by supervised medication, educating the patient about the side-effects and the need for regular follow up.

**Keywords:** *Old age, Schizophrenia, Late onset, Compliance, Follow up, Geriatric Psychiatry.*

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Although we are accustomed to thinking of schizophrenia as an illness with onset in late adolescence or early adulthood and which is presumed to have a neuro developmental basis, psychoses that satisfy diagnostic criteria for schizophrenia can arise *de novo* at any point in life (Sadock et al 2005). The onset of schizophrenia in mid to late life has been a controversial issue. Martin Roth for the first time introduced the term “Late onset schizophrenia” as a distinct entity and used the term “Late Paraphrenia” with onset of illness after the age of 60 years (Roth et al, 1952). Psychotic disorders in elderly can be divided into three types : disorders that have started in earlier life and persist into old age; disorders that start *de novo* after the age of 60, and psychosis associated with underlying brain disease. Psychosis is generally considered as an illness with onset at an early adult life. And any psychotic illness occurring at a later age is assumed to be due to an underlying organic condition. Functional psychosis at a later age poses a diagnostic challenge for clinicians.

Relatively little research has examined the possible onset of psychosis in middle or old age or even evaluated the course of psychosis in elderly patients. Research in this area has been limited by variable terminology and unclear diagnostic criteria in elderly. Unfortunately, there have been few follow-up studies to guide the clinician treating a patient with late-onset psychosis in terms of prognostic indicators. Limitations of these studies of late-onset psychosis include the diversity in schizophrenia diagnoses and the short duration of follow-up. Psychosis being a chronic debilitating disorder adds to a significant morbidity rate. Hence compliance and regular follow up with a clinician is highly important to treat the disorder (Faloon, 1984). Non-compliance with treatment has many dimensions: not taking the prescribed medications or using them irregularly; using non-prescribed medications; missing appointments; missing the follow-ups and other behaviors (Docherty et al, 1985). Salzman (1995) emphasized that noncompliance is a serious issue in the elderly, wherein its prevalence may be as high as 75%. Medication non adherence is one of the major avoidable reasons causing relapses and morbidity. Rehospitalization leads to occupational and family problems and subsequently decreases the patient’s quality of life (Misdrahi D et al, 2002). Considering the high drop out rates of patients after first visit in patients with a diagnosis of psychosis and also limited research in this area, this study was done to evaluate the various factors influencing the compliance, outcome and follow up.

### **MATERIALS AND METHODS**

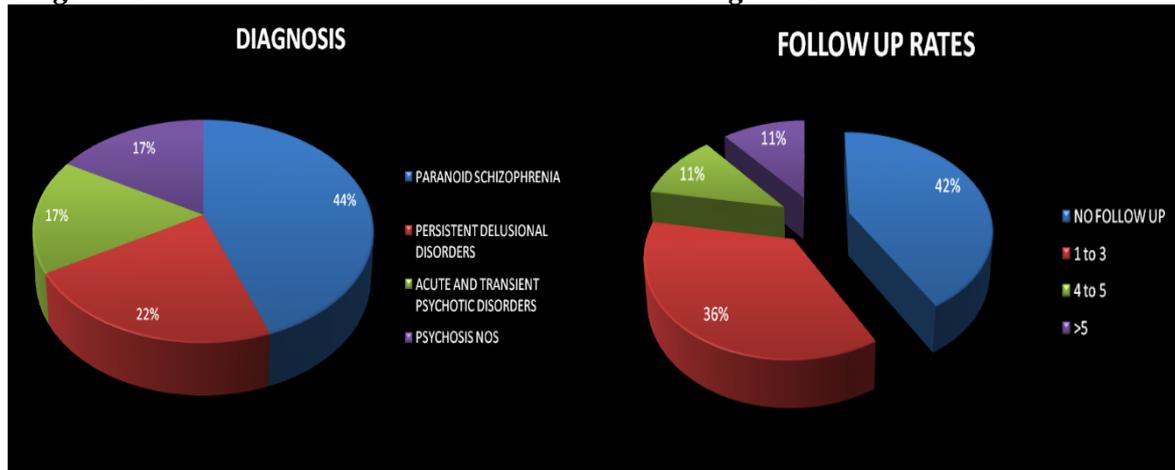
Chart of all patients [n = 36] diagnosed as late onset psychosis [ICD 10 category of F20 – F29], evaluated in psychiatric services of CIMS treated both in IP and OP care, were reviewed. Patients were evaluated between December 2015 to December 2017 and followed up [2 years]. Patients with comorbid medical disorders and mental retardation were excluded from the study. Relevant sociodemographic and clinical variables like compliance, number of follow ups were collected, coded, entered and analyzed. 36 patients met the criteria and they were systematically analyzed.

### **RESULTS**

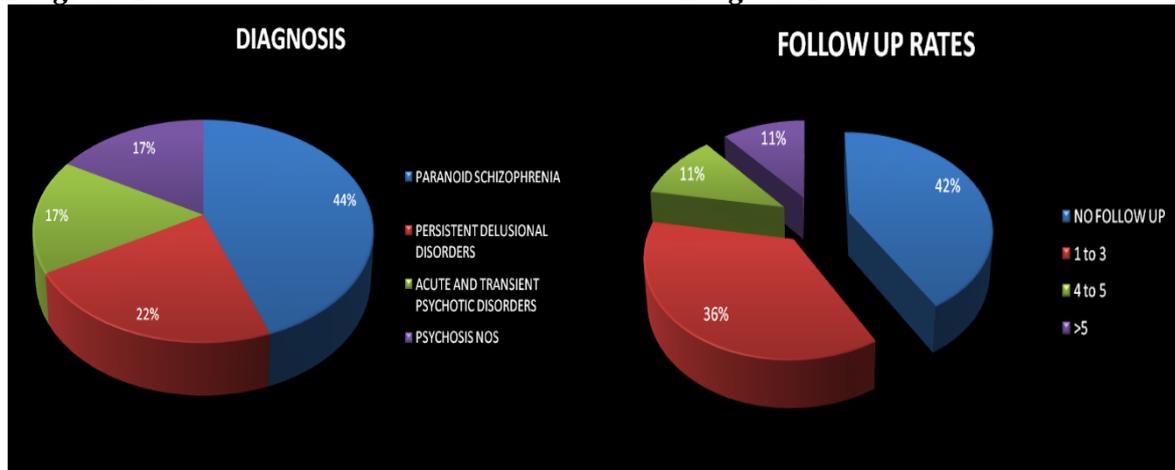
A total of 36 patients were identified as late onset psychosis in the specified period. Mean age of the sample was 72.5 +/- 7.5 years (range 60-85 years). Out of which 47.2% were females. Paranoid schizophrenia is the commonest type of psychosis (44.4%). 41.6% had good compliance. 38.89% did not come for follow up. It was observed, literates had come for more no. of follow ups. Interestingly, illiterates [n-18] had a better compliance [n-7]. It was also observed that patients with shorter duration of illness [n-7] had a good compliance. Quetiapine had a better compliance (16.6%) with maximum response (13.89%).

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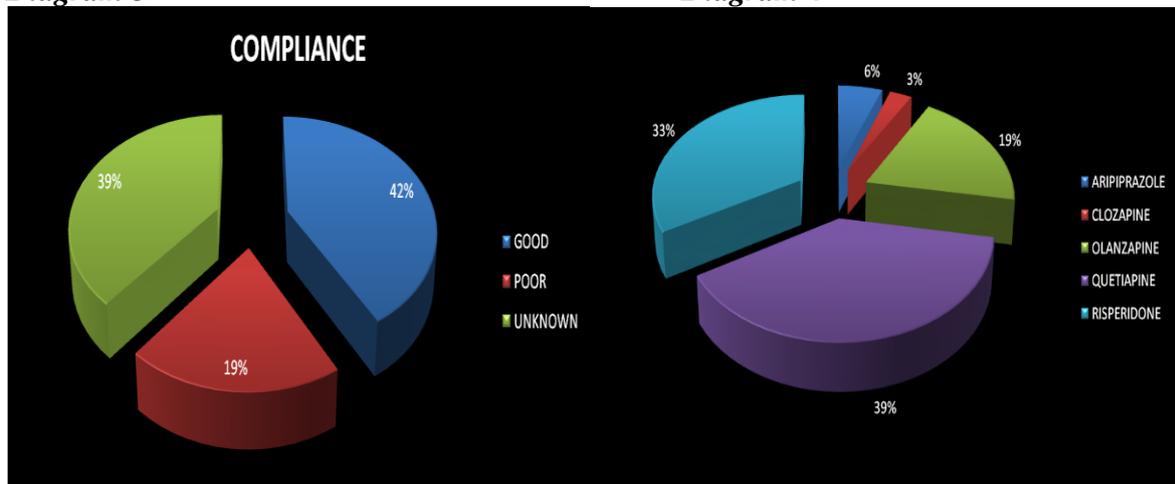
**Diagram 1**



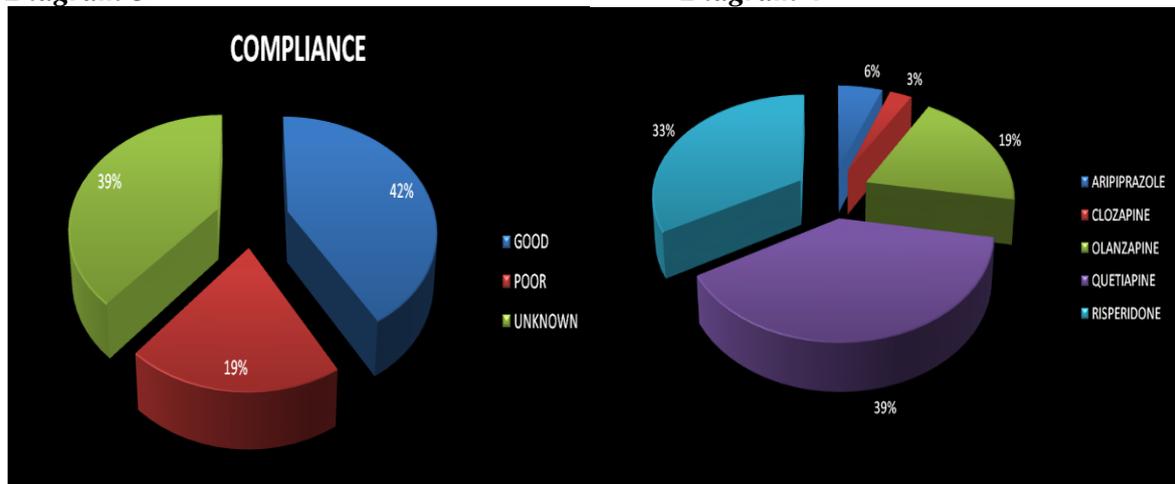
**Diagram 2**



**Diagram 3**



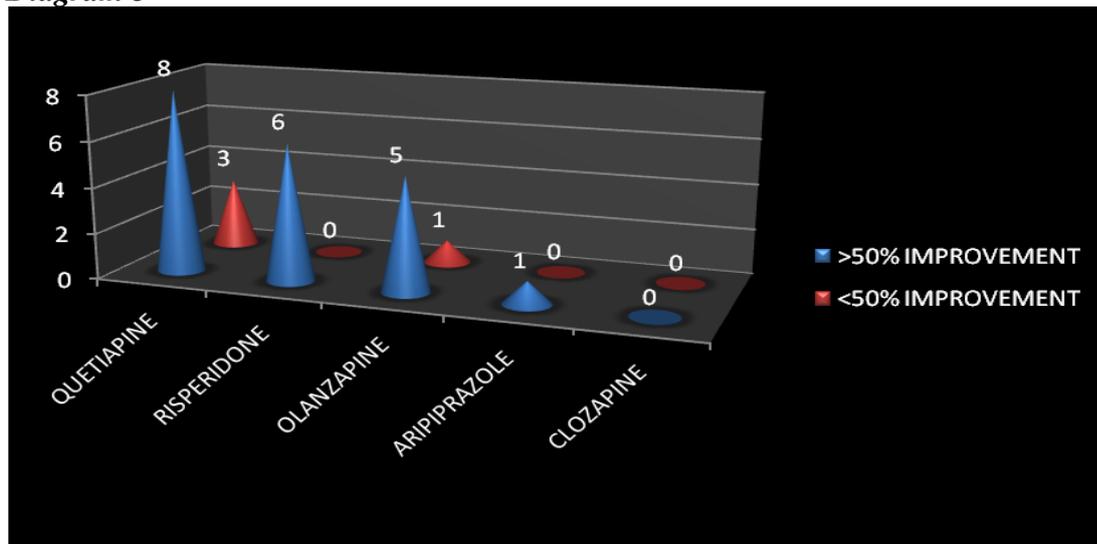
**Diagram 4**



**Table 1**

	Follow Up		Compliance	
	No FU	> 1 Fu	Poor	Good
<b>Literacy</b>				
<b>Not Lit.</b>	10	9	3	7
<b>Literate</b>	5	12	3	9
<b>SES</b>				
<b>Low</b>	2	5	2	2
<b>Middle</b>	12	12	5	9
<b>High</b>	0	5	0	4

Diagram 5



### Clinical Improvement & Medication

#### DISCUSSION

This study shows that follow up is poor in severe mental illness like late onset psychosis. Follow up is influenced by factors like literacy and socioeconomic status. Higher the education better was the follow up rates. Social factors and type of drugs seemed to influence compliance. Noncompliance remains one of the greatest challenges when prescribing psychotropic medication especially in the elderly population. Non compliance not only increase treatment costs and prolong the duration of hospitalization, it also has a human cost in terms of morbidity and mortality. According to Fawcet (1995) the factors influencing compliance can be grouped into 5 dimensions:

1. Patient characteristics (e.g., attitudes toward illness and medication, socioeconomic considerations, social supervision);
2. Treatment setting (e.g., primary care versus specialty office and inpatient versus outpatient);
3. Medication characteristics (e.g., side effects, individual sensitivity to side effects, simple versus complicated medication regime);
4. Clinical features of the disorder (e.g., chronicity, exaggerated feelings of guilt in depression, suspiciousness in schizophrenia, substance abuse and comorbid anxiety); and
5. Clinician expertise (e.g., knowledge of pharmacology, empathy, instilling hope, successful integration of pharmacology and psychotherapy).

Apart from the above 5 factors, another important factor in the elderly is to identify and treat the associated medical as well as psychiatric comorbidities (Perkins et al, 2002 & Lacro et al 2002). Disease related factors also affect compliance. Negative symptoms lead to poorer compliance compared to positive symptoms (Aker et al, 2000 & Perkins et al, 1999). Aker et al found that serious psychopathology was one of the leading factors in non-compliance with medication treatment (64.9%). Adverse effects are likely to be the most common reason for patients to not comply with prescribed medication regimens. Poly pharmacy (Aker et al, 2000), complexity of the regimen, ineffectiveness and the cost of the drugs are also important medication-related factors contributing to noncompliance (Pan et al, 1989). The use of newer effective medications like quetiapine that have fewer adverse effects and low-dose treatment

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strategies may ameliorate adverse effects. In this study also it has shown that quetiapine had a better compliance rate as compared to other drugs. And also poly pharmacy to be avoided as much as possible to improve compliance. Another important element while treating patients with antipsychotics is to address the management of antipsychotics induced side effects like extrapyramidal symptoms, akathisia and also metabolic side effects (Misdrahi et al,2002). Weight gain also adversely affects compliance (Olfson et al, 2000, Janicak et al,2001, Lindstrom et al,2000). Psycho educating the patient about the medications given, drug interactions, the probable side effects and methods to manage the side effects should be a part of any clinicians protocol in the first visit only (Pitschel et al,2006) . In the elderly patients medication compliance assistance like pill boxes can also be given.

Interestingly in this study illiterates had a better compliance compared to literates. This pattern might be due to less psycho education one tends to give it to literates assuming they know all about the illness and the treatment. Hence all the patients should be given uniform psycho education, irrespective of the education background or socioeconomic status. During the first visit, the treating clinician should define illness from the patient's perspective, define target symptoms, support and understanding of the patient's experience and mention rationale for the subscribed medications, effects - side effects ratio and methods to combat the side effects. Education of primary caretakers and family also becomes an important aspect of the treatment protocol (Lindstorm et al,2000). The family's approach and attitude towards medication and the disease, and a high level of expressed emotions are other factors that affect compliance with treatment (Sellwood et al,2003).

Poor insight, lack of illness awareness (Lacro et al,2002) and lack of family and social support, are also important factors leading to adherence problems. This can be dealt with psychotherapy which can be used as a tool to improve compliance. Expressing an understanding, empathic and caring manner will always improve practitioner - patient relationship and which in turn improves compliance and further follow ups (Olfson et al,2000). In a study conducted by Gallucci and et al. in 2005, they stated that non-attendance at the first appointment following hospital discharge was a strong indicator of non-compliance; they emphasized the importance of scheduling the first appointment, especially during the first week and they pointed out that prolonging the first appointment distorted attendance of subsequent appointments. According to study done by Shoffner et al., phone reminders were an effective method of improving compliance with appointments.

To conclude all psychiatric clinics should have a "protocol of non-compliance management" (Mitchell et al, 2007)

## CONCLUSION

This study shows that follow up is poor in severe mental illness like late onset psychosis. More than 50% of them who came for follow up had poor compliance. Atypical antipsychotics had a better compliance rates compared to typical anti psychotics most likely because of lesser side effects. It was also observed that patients with shorter duration of illness had better compliance than chronic illness. Educated patients came for more number of follow ups.

## REFERENCES

Aker T, Üstünsoy S, Kuğu N, Yazıcı A. Psikotik bozukluğu olan hastalarda tedaviye uyum ve ilaç tedavisine uyumsuzluğu değerlendirme ölçeği. 36. Ulusal Psikiyatri Kongresi Özet Kitabı, 2000.

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- Cruz M, Cruz RF, McEldoon W. Best practise for managing noncompliance with psychiatric appointments in community- based care. *Psychiatr Serv* 2001; 52:1443-1445 3
- Docherty JP, Fiester SJ. The therapeutic alliance and compliance with psychopharmacology. *Review of Psychiatry*. In: American Psychiatric Association (editor). *Psychiatry update*. Washington DC: American Psychiatric Press 1985; 607-632.
- Faloon IRH. Developing and maintaining adherence to long term drug taking regimens. *Schizophr Bull* 1984; 10:412-417.
- Fawcett J (1995), Compliance: definitions and key issues. *J Clin Psychiatry* 56(suppl 1):4-8
- Holzinger A, Loffler W, Muller P, Priebe S, Angermeyer MC. Subjective illness theory and antipsychotic medication compliance by patients with schizophrenia. *J Nerv Ment Dis* 2002; 190:597-603.
- Galucci G, Swartz W, Hackerman F. Impact of the wait for an initial appointment on the rate of kept appointments at a mental health center. *Psychiatr Serv* 2005; 56:344-346.
- Janicak PG, Davis JM, Preskorn SH, Ayd FJ (editors). *Compliance; Principles and practice of Psychopharmacotherapy*. Third Ed. Philadelphia:Lippincot Williams and Wilkins, 2001,43-44.
- Kemp R, Kirov G, Everitt B, Hayward P, David A. Randomized controlled trial of compliance therapy. *Br J Psychiatry* 1998; 172:413-419.
- Lacro JP, Dunn LB, Dolder CR, Leckband SG, Jeste DV. Prevalance of and risk factors for medication nonadherence in patients with schizophrenia: a comprehensive review of recent literature. *Am J Psychiatry* 2002; 63:126-128.
- Lindstrom E, Bingerfors K. Patient compliance with drug therapy in schizophrenia. Economic and clinical issues. *Pharmacoeconomics* 2000; 18:106-124.
- Marder SR. Overview of partial compliance. *J Clin Psychiatry* 2003; 64 (Suppl.16): 3-9. 9.
- McGlashan TH, Carpenter WT Jr. Does attitude toward psychosis related to outcome? *Am J Psychiatry* 1981; 138:797- 801.
- Misdrahi D, Llorca PM, Lancon C, Bayle FJ. Compliance in schizophrenia: predictive factors, therapeutical considerations and research implications. *Encephale* 2002; 28:266-272.
- Mitchell AJ, Selmes T. A comparative survey of missed initial and follow-up appointments to psychiatric specialties in the United Kingdom. *Psychiatr Serv* 2007; 58:868-871.
- Olfson M, Mechanic D, Hansell S, Boyer CA, Walkup J, Weiden PJ. Predicting medication noncompliance after hospital discharge among patients with schizophrenia. *Psychiatr Serv* 2000; 51:216- 222.
- Pan PC, Tantom D. Clinical characteristics, health beliefs and compliance with maintenance treatments, a comparison between regular and irregular attenders at a depot clinic. *Acta Psychiatr Scand* 1989; 79:564-570.
- Perkins DO. Adherence to antipsychotic medications. *J Clin Psychiatry* 1999; 60:25-30.
- Perkins DO. Predictors of noncompliance in patients with schizophrenia. *J Clin Psychiatry* 2002;63:1121-1128.
- Pitschel-Walz G, Bauml J, Bender W, Engel RR, Wagner M, Kissling W. Psychoeducation and compliance in the treatment of schizophrenia: results of the Munich Psychosis Information Project study. *J Clin Psychiatry* 2006; 67:443-452.
- Roth M, Morrisey JD. Problems in the diagnosis and classification of mental disorders in old age. *J Ment Sci* 1952;98:66-80.
- Sadock BJ, Sadock VA. *Comprehensive textbook of psychiatry* (8th ed). Philadelphia: Lippincott Williams & Wilkins, 2005, p.3700-3706.
- Salzman C (1995), Medication compliance in the elderly. *J Clin Psychiatry* 56(suppl 1):18-22
- Sellwood W, Tarrrier N, Quinn J, Barrowclough C. The family and compliance in schizophrenia: the influence of clinical variables, relatives, knowledge and expressed emotion. *Psychol Med* 2003; 33:91-96.

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Shoffner J, Staudt M, Marcus S, Kapp S. Using telephone reminders to increase attendance at psychiatric appointments: findings of a pilot study in rural Appalachia. *Psychiatr Serv* 2007; 58: 872-875.

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### ***Conflict of Interest***

The author declared no conflict of interests.

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