Original Research Article

Factors affecting duration of untreated psychosis - A retrospective study done in general hospital setting

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Abstract

Background: Duration of the untreated psychosis has been predicted to be one of a factor which affects the outcome of disease and leading to poor prognosis in the patients. Previous studies had predicted that the longer the duration of psychosis the poor the outcome of the treatment.

Aim: To assess the factors affecting the Duration of untreated psychosis among patients with first episode psychosis in General hospital setup.

Materials and methods: Retrospective study was done on patients who got admitted for the duration of 6 months (1st June 2014 to 31st November 2014). Patients who were diagnosed to have first episode psychosis according to ICD-10 were taken up for the study. Duration of untreated psychosis and the socio demographic details were noted.

Results: The duration of untreated psychosis was seen more in male (58%), 45% in age group of 20-29, 54% were married, 71% in lower middle economic status, 75% of people were from semi urban background and 41% of patients had duration of untreated psychosis for duration of 2-5 weeks. Mean average age is 30.75 and duration of untreated psychosis is 40 days.

Conclusion: Mean average age is 30.75 and duration of untreated psychosis is 40 days. Age, gender, marital status, socio-economic status and residence (Environment) acting as a predictor for the long DUP is consistent with previous studies but significant findings couldn't be found, when two groups

were compared thus giving the conclusion that Sociodemographic factors alone doesn't influence on DUP.

Key words

Duration of untreated psychosis, Psychiatric inpatients, India.

Introduction

Duration of untreated psychosis is defined as the time between onset of psychosis and the start of hospitalisation or adequate antipsychotic drug treatment (WHO). Importance of first episode psychosis had been noted only for last two decades [1]. Earlier studies and metaanalysis had shown that longer duration of untreated psychosis is known to be associated with poorer outcome of remission of the psychotic symptoms [2].Recent studies had been one focusing on early detection of schizophrenia and the duration of untreated psychosis and exploration schizophrenia both clinically and neuroanatomically [3,17]. This last decade a number of studies on first episode psychosis had revealed that schizophrenic patients had significant duration of active psychosis prior to first treatment and hospitalisation. Apart from some negative studies there is evidence from prospective and retrospective studies that longer the duration of psychotic symptoms before treatment, poorer the response to treatment and outcome of global functioning [4, 15].

Latest study done on 119 patients assessed the treatment outcome in LAMI (low and middle socio economic) countries showed there is association of DUP and outcome of patient with never treated schizophrenia and found that longer DUP is associated with poorer outcomes [5]. Another study showed that early intervention approach to treating first episode psychosis is supported by evidence of some increased short-term clinical and functional outcomes, such as higher retention in treatment, lower relapse rates, increased satisfaction with service delivery, greater family involvement, and improved quality of life [6, 18]. Many studies had assessed that the "acute" onset (the presence of active symptoms suggesting a schizophrenic illness for less than 6 months before the initiation of treatment) was grouped among the predictors of good outcome [7, 16, 17].

Materials and methods

Retrospective study was done on patients who got admitted under 30 bedded psychiatric department in Chettinad Hospital and Research Institute with first episode of psychotic symptoms. Both male and female patients who got admitted during the period of 7 months (1st June 2014 to 31st December 2014) were included. Patients diagnosed with psychotic disorder according to ICD-10 (F20-29) [8] criteria by our psychiatric team and who were drug naïve to antipsychotics were taken up for the study. Ethical committee approval was obtained. Patient's attenders who were willing to give consent were taken up for the study and patients who had previous history or recurrent episodes were excluded from the study.

Study Procedure

Inpatient records of these patients were reviewed systematically. Their socio-demographic details were noted along with the time of onset of the symptoms, Which was carefully assessed and the duration of untreated psychosis was elicited as the time of first-distressing symptoms either positive (hallucinations, delusions, and odd beliefs thought disorder) or negative symptom (depression, dysphoria, apathy, anergia, apathy, and amotivation) and social decline (withdrawn behaviour, poor interpersonal relationship, social avoidance, and lack of interest in education or work) to decide the onset of illness to the hospitalisation with initiation of the antipsychotics. Total number of patients taken up for the study was 37 who were above 10 years of age including both male and female. Patients' inpatient records were taken up for the chart

review and after excluding the patients who had recurrent or previous history, 24 of them were taken up for the study. The socio demographic details of the patients were noted and the mean duration of 6 weeks was taken and divided as two groups. Socio-demographic variables, clinical parameters were analysed by frequencies and percentages. IBM SPSS version 21 was used for statistical analysis. Chi square test was used for assessing statistical significance.

Results

Among the 37 participants who were taken up for the study the 24 patients (as shown in **Table - 1**) who were taken up for the study, major group of patient were between the age group 21-29 (45%). Mean average age is 30.75 .58% of them were male. More number of participants were from middle socio economic status (71%), half of the study subjects were married (55%). On assessing the educational qualifications of the study participants, half of them were middle school educated. Duration of untreated psychosis is 40 days. On comparing the two groups (DUP<6 weeks and DUP >6 weeks) number of participants in 1st group (< 6 weeks) was 18 and 6 of them in second group (>6 weeks). When variables on the two groups were compared female showed significant change (0.058) and significant change in married participants (0.052) as per **Table - 2**.

Discussion

There is a well-established association between DUP, critical period and early intervention, these associations are independent of confounding factors, including premorbid functioning, gender, diagnosis and age of onset of symptoms' variance in functional recovery has been reported [9]. There are several cultural, social, religious, economic and personal factors which determine approach to mental healthcare, which obviously leads to longer DUP [11]. In this study the maximum number of patients with DUP are between 2-5 weeks indicating shorter duration of DUP, when two groups (DUP less than 6 weeks and DUP more than 6 weeks) were compared.

No significant differences could be found in the age group between 30-39 (0.34), gender - female (0.50) and high school qualifications (0.56) which act as a factor for the prolongation of the duration of untreated psychosis according to the previous studies [12]. Main problem involved in assessment of DUP in our study involves retrospective recall of onset of psychosis, leading to the usual problem of recall bias. The mean average age of DUP in our study is 30 years, which is consistent with the earlier studies done by Amresh shrivastava, et al. and Mariamma Philip, et al. [9, 11]. The Average duration of untreated psychosis in our study was 40 days which is considerably less when compared to previous studies done in India where average duration of untreated psychosis was 720 days.

Table - 1: Socio demographic details.

Gender	N=24
Male (15)	58%
Female(9)	42%
AGE in years	
10-19	5 %
20-29	45%
30-39	33%
>40 yrs	7%
Marital status	
Married	55%
Single	45%
Socio Economic status	
Middle /Lower Middle	71%
Lower /Upper lower	17%
Lower	12%
Educational status	
Primary school	16.6%
Middle school	50%
High school	16.6%
Graduate /Post Graduate	16.6%
Background	
Semi Urban	75%
Rural	25%

Table - 2: Factors on Duration of untreated psychosis.

Age	DUP <6wks	DUP>6wks	P-value
10-19	0	1	0
20-29	8	3	.132
30-39	7	1	.034
>= 40	3	1	.317
Gender			
Male	10	4	.109
Female	8	2	.058
Marital status			
single	8	3	.132
married	10	3	.052
Education			
Primary school	3	2	0.655
Secondary school	9	3	0.83
High school	2	1	0.564
Graduate/postgraduate	4	0	0
Socio economic status			
Middle/upper middle	15	4	0.125
Lower/upper lower	1	2	0.564
lower	2	0	0
Background			
Semi urban	13	5	0.59
rural	5	1	0.102

Conclusion

Mean average age is 30.75 and duration of untreated psychosis is 40 days. Age, gender, marital status, socio-economic status, and residence (Environment) are acting as a predictor for the long DUP is consistent with previous studies. No statistical significance could be found.

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