CONSIDERATION ABOUT TREATMENT NONCOMPLIANCE IN SCHIZOPHRENIA AND HOSPITAL ADDRESSABILITY

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Abstract: It is estimated that between 26% and 88% of patients with schizophrenia fail to take their medication correctly (1). As it is proposed that the lack or partial non-compliance plays an important role in eliciting the relapse and rehospitalisation, the aim of the current study was to examine the treatment non-compliance and the type of hospitalization in schizophrenic patients. We considered two years (2008, 2009) of schizophrenic hospitalizations in Psychiatry and Neurology Hospital Brasov (in departments II and III). The differences amongst the treatment compliance of schizophrenic patients reflected in addressability to the hospital and implicit voluntary and involuntary hospitalization were found.

Key words: treatment compliance, schizophrenia, hospitalization.

1. Introduction

Schizophrenia is a chronic disease, and the problem of non or partial compliance represents a major challenge to successful treatment outcomes. The value of longterm antipsychotic drug treatment in reducing the frequency of relapse and hospitalization has been clearly demonstrated in a number of long-term trials. A review of 6 studies showed a mean one year relapse rate of 74% placebo treated patients versus 16% of patients who were correct medicated during this period [2]. Among patients experiencing relapse, episodes are less severe in those who adhered to a medication compliant. Compliant patients are less likely to have episodes characterized by self destructive behaviour, violent behaviour and antisocial acts [3]. Non adherence to prescribed regimen may impact negatively and prognosis, especially in patients who are in the early stages of schizophrenia [4, 5]. It can also compromise a patient's daily functioning and quality of life (6). The risk for non-compliance and partial compliance are exacerbated by the autonomy of the outpatient setting [7]. The most tragic result of treatment failure, for both patients and their families, is suicide. Risk for suicide is increased in schizophrenia and is highest in men. A meta analysis of 29 studies found a significant increase in suicide in patients who were noncompliant or partially compliant with treatment [8].

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Scientific literature reported that only about one-third of patients with schizophrenia are to be fully compliant, another third are said to be partially compliant, meaning that these patients will either reduce the dose of the drug prescribed or fail to take medication from time to time. The remaining patients do not follow prescription instructions at all [9, 10,11].

The factors influencing compliance related to the patient's environment (negative attitude toward psychiatric treatment of patient family and the media, poor social rapport when the patient is living alone, "low" social rank of illness, and attitude toward the illness and its treatment in the social and therapeutic environment were also investigated [12].

2. Method

This study examined all the male and female patients diagnosed with schizophrenia (DSM-IV), who were experiencing an acute relapse treatment that required hospitalization during a two

years period, between 1 January 2008 and 31 December 2009 in the psychiatric departments II and III of the Psychiatry and Neurology Hospital Brasov. All of them were assessing about demographic data, the type of hospitalization (presenting in emergency, sending by GP, specialist or inter-hospitals transfers, criteria hospitalisation (emergency, hospitalized for diagnosis, for treatment etc.), the modality to present: alone, with family or friends, with ambulance and police and treatment compliance declared by the patient or informants.

3. Results

Between 1 January 2008 and 31 December 2009 there were hospitalized 986 patients with schizophrenia 485 in 2008 and 501 in 2009, 53,85% female and 46,15% male in both years, F/M = 1,16, 13,43% aged under 30 years, and 86, 57% between 31 and 65 years. Any way 54.16% were between 31-50 years; 76,67% patients from urban area, 23,33 from rural area, 57,90% unmarried, 25,05% married, 17,04% divorced.

Ocupational status of patients with schizophrenia

Occupation	N	%
Employees	40	4.05
Age retired	40	4.05
Disease retired	666	67.54
Handicap allowance	84	8.54
Unemployed	156	15.8
TOTAL	986	100

One of the most important finding of our study was the fact that the majority of hospitalisations of patients with schizophrenia were voluntary 98,69% (fig. 1).

Extremely important are the data that suggested that 63,18% of those voluntary hospitalised patient were fully or partially treatment compliant (self report). Only

35,97% self declared full noncompliant compliant in the case of involuntary comparative with 100% nontreatment hospitalization.

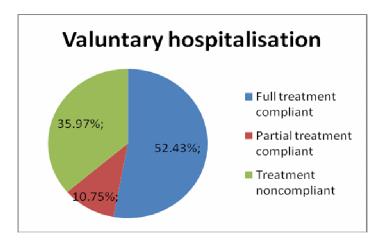


Fig.1. Treatment compliance of patients with voluntary hospitalization

An interesting finding in our study according to the type of hospitalisations of patient with schizophrenia was the fact that the greatest part of those patient (89,53%) addressed for hospitalisation alone, brought by family members or sent by GP. Only 1,92% were brought by police and ambulance and 1,66% were

hospitalisations through inter-hospital transfer (figure 2).

The greatest full self declared treatment compliance belongs to the patients with schizophrenia coming alone or with family.

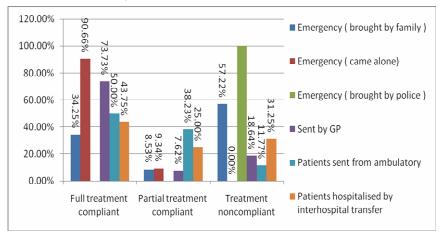


Fig. 2. Hospitalization and treatment compliance

Another important aspect resulting from the study was the reduced number of patients with only one hospitalisation in the period of time under the study (81,4%) and only 5,28% patients with schizophrenia were hospitalised more than 3 times in that period (Table 2).

Table 2
The number of hospitalisation of patient with schizophrenia
in the period of time under study

Number of hospitalisation for schizophrenia patients / year	Absolute Values	%
Patients with 1 hospitalisation/year	801	81.40
Patients with 2 hospitalisation/year	133	13.48
Patients with 3 hospitalisation/year	31	3.15
Patients with 4 hospitalisation/year	6	0.60
Patients with more than 5 hospitalisation/year	15	1.53
TOTAL	986	100.00

4. Conclusions and Discussions

Every-day clinical practice conditions studied retrospectively over a long period of time (two years) about the type of hospitalization of patients with schizophrenia evidenced the fact that the greatest part of 77.58% those patients presented at emergency room came alone accompanied by the Consequently, the greatest part of all the patients with schizophrenia hospitalized in that period of time agreed with the hospital setting, only a minority 1,3% of them were involuntary hospitalized.

Another finding of the study was the fact that between the patients with schizophrenia voluntary hospitalized 52,43% were full treatment compliant, 10,75% were partial treatment compliant and 35,97% were noncompliant with antipsychotic medication, according with self rapport.

Women seem to be more likely to comply with antipsychotic medication than men 75,70% in outpatient setting, comparative with 25,30% male; also women were totally incompliant 14.70%, comparative with 62.80% man in our study. Those findings are similar with data from other study [13].

All the patients compulsory hospitalized were 100% treatment noncompliant in our study.

Studying the number of hospitalization every year we had notice that patients with schizophrenia self treatment compliant had only 1 hospitalization per year, instead of the other that had 2-5 hospitalization per year. Thus, the inadequacy of schizophrenia treatment has high costs for both patients and society as a whole. The economic burden to society is generated largely by relapse and rehospitalisation, as the other noticed [14].

Comorbid substance abuse has been shown to have a negative influence on compliance in patients with schizophrenia [15,16]. In our study 5,68% from all the hospitalized patients in that period of time had this comorbidity.

Despite the fact improve compliance in patients suffering from schizophrenia remain an important issues, compliance rates have remained basically unchanged. Therefore, following Heisenberg's principle, it must be assumed that any clinical research carried out to investigate compliance will have an influence on compliance itself and perhaps this is the most important finding of our study.

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