

Comparative Study between the Quality Management Indicators, Marker of Major Psychiatric Disorders in Evolution

D. BONDARI¹, SIMONA BONDARI¹,
IOANA GHEONEA¹, ANDREEA ANDRONACHE¹

¹Department of Radiology and Imagistic Medicine, University of Medicine and Pharmacy of Craiova

ABSTRACT: Indicators of quality management are represented by: accounting hospitalization days (duration of stay); mortality rate; the rate of nosocomial infections; patients readmitted in 30 days; the percentage patients transferred; inconsistent diagnoses. The hospitalization period is a marker of evolution. The present study reflects comparative data between duration and the number of hospitalisations in patients with major psychiatric disorders. Introduction. Medical Psychiatry as a discipline has developed a specialized approach in the treatment of mental diseases, a phenomenon linked to the progress of knowledge of psychopathology and the increasing complexity of methods of diagnosis and treatment. The history of psychiatric patients reflects not only changes in scientific understanding of mental disorder, but also the beliefs of political, social and economic interests of that period [1,2]. Objectives. We analysed the duration and number of hospitalisation in patients with schizophrenia, psychotic disorders compared to those with bipolar disorder and major depressive disorder in Psychiatric clinic from Craiova between 2006-2010. Method. Retrospective study during 2006-2010 took into account 8234 patients aged between 20-65 years from the Psychiatric Clinic Craiova constituting four groups: group N1=989 patients belonging to the schizophrenia group; group N2=1222 patients with psychotic disorders, group N3=918 patients with bipolar disorder and group N4=5101 with major depressive disorder. For data processing we used Microsoft Excel (Microsoft Corp., Redmond, WA, USA), together with the suite for MS Excel XLSTAT (Addinsoft S.A.R.L., Paris, France) and IBM SPSS Statistics programme 20.0 (IBM Corporation, Armonk, NY, USA). Results. Schizophrenia being defined as a chronic disease was noted that 85.4 % of the patients from the first group received at least two admissions during the trial. Females have better prognosis, having a lower share in the group with multiple hospital admissions. The duration of the stay was longer than two weeks for 61.7% in the N1 group. Group N2 patients, bipolar disorder, have received at least two admissions, the share between the sexes is similar, the duration of hospitalisation not exceeding 7 days for 54.2% of patients with bipolar disorder. Women with more than 14 hospitalisation days had a share of 21.6%. Duration of hospitalization with the N3 group was of maximum two weeks at 71.4%, the group of major depressive disorders N4 had a number of short admissions of 44.4%. Conclusion. Statistically significantly high differences ($p=0.000233<0.001$) in favor of the schizophrenia and psychotic disorders group compared with the group of disorders of affectivity, in terms of the number and the duration of hospitalizations, marker of the evolution on the long term.

KEYWORDS: quality management indicators, duration of the hospitalization, number of hospitalizations, schizophrenia, bipolar disorder, major depressive disorder

Introduction

Medical Psychiatry as a discipline has developed a specialized approach in the treatment of mental diseases, a phenomenon linked to the progress of knowledge of psychopathology and the increasing complexity of methods of diagnosis and treatment. The history of the management of psychiatric patients reflects not only changes in scientific understanding of mental disorder, but also the beliefs of political, social and economic interests of that period [1,2].

Major psychiatric disorders held a significant share in the areas of the two clinics in the range studied-42.9%, actually explainable through the specifics of emergency of the two departments, with the tendency to directing cases of light/medium intensity to outpatients and semioutpatients, in order to reduce costs.

Number and duration of the hospitalization represent a predictive factor for the evolution of major psychiatric disorders. Thus in this study it was observed an increased number of hospitalizations in the groups N3 and N4- considered the affective disorders, over 5 hospitalizations representing a rate more than double than the psychotic disorders and schizophrenia, N1 and N2.

Although the percentage differences in terms of the number of hospital admissions are small between the two larger groups of patients that have been analyzed (N1+N2 and N3+N4), the fact that were analyzed groups of thousands of patients makes these differences, of about 5 per cent, to be highly significant from the statistic point of view ($p=0.000233<0.001$) (Table 1, Fig.1).

This confirms the definition of schizophrenia as chronic disease, compared to other major psychiatric disorders studied, through increased

numbers of admissions, therefore women in the schizophrenia group have better prognosis

through fewer and shorter duration of admissions compared to men [3]

Table 1. Numbers of admissions

Percent of each category			Percent of total patients - 8234		
Nr of hospitalizations	N1+N2	N3+N4	Nr of hospitalizations	N1+N2	N3+N4
1	16.60%	20.95%	1	4.46%	15.33%
2-5	68.43%	65.02%	2-5	18.38%	47.56%
> 5	14.97%	14.03%	>5	4.02%	10.26%
Total	100.00%	100.00%	Total	26.85%	73.15%

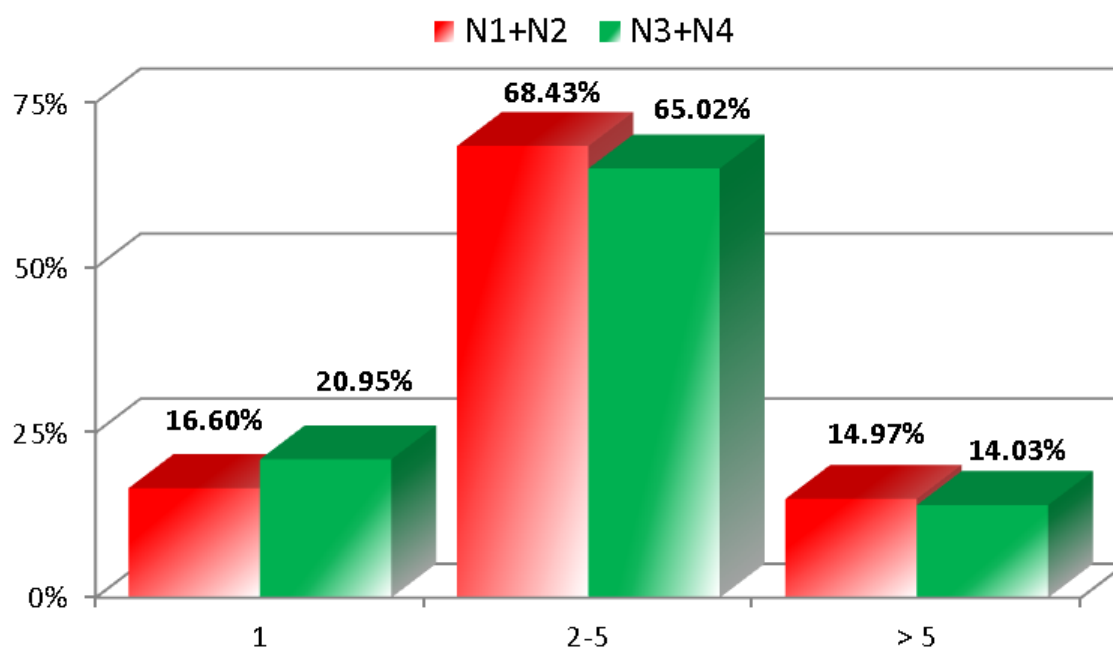


Figure 1. Numbers of admissions

As for the duration of hospitalization, we can observe a highly significant difference (p Chi square=2.41 x 10-60<0.001) between the two groups, patients with affective disorders given the ratio of ~25% hospital admissions shorter

than 7 days, compared to only 8% of patients with schizophrenia or psychotic disorders, while the latter have a higher proportion of over 60% (62,69%) of hospitalization longer than 2 weeks (Table 2, Fig.2)

Table 2. Duration of admissions

Per cent of each category			Per cent of total patients- 8234		
Nr of hospitalizations	N1+N2	N3+N4	Nr of hospitalizations	N1+N2	N3+N4
<7 zile	7.82%	24.26%	<7 zile	2.10%	17.74%
7-14 zile	29.49%	24.27%	7-14 zile	7.92%	17.76%
>14 zile	62.69%	51.47%	>14 zile	16.83%	37.65%
Total	100.00%	100.00%	Total	26.85%	73.15%

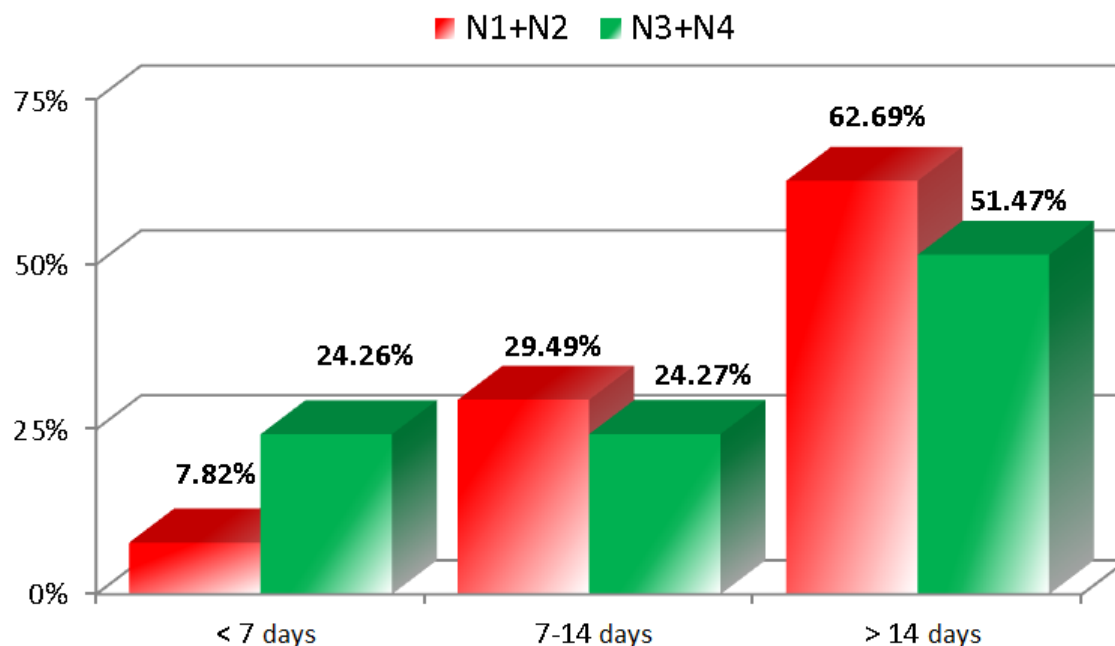


Figure 2. Duration of admissions

It is observed in this study, the greater number of hospitalizations in schizophrenia and psychotic disorders groups, compared with the group of affectivity disorders, which allows a predictability on the evolution of the disease, higher costs and a plan for appropriate psychiatric management [4,5,6]. Further studies are needed to detect significant differences in overall cost-effectiveness report, including measures for the total costs of psychiatric care, general medical costs, and the costs of out-side of the care system.

Quality management indicators represent for sure the marker of evolution for major psychiatric disorders.

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Corresponding Author: Simona Bondari, MD, Department of Radiology and Imagistic Medicine, University of Medicine and Pharmacy of Craiova, Petru Rares St. no. 2-4, 200 349, Craiova, Romania; e-mail: simonabondari@yahoo.com