

Mechanical restraint in the acute psychiatric units of Hospital del Mar, Barcelona

Marina Angelats¹, Laia Pujol¹, Adinson Brown^{2,3}, Albert Mas⁴, Víctor Pérez Solá^{1,5,6}, Purificación Salgado^{1,5}, Daniel Bergé^{1,5}

¹ Institut de Neuropsiquiatria i Addiccions, Parc de Salut Mar, Barcelona, España. ² Centre Intégré de Santé et des Services Sociaux de Chaudière-Appalaches –Centre Hospitalier Affilié - Hôtel-Dieu de Lévis, Lévis, Québec, Canada. ³ Chargé d'enseignement clinique, Université Laval, Québec, Canada. ⁴ Hospital de Palamós, Serveis de Salut Integrats del Baix Empordà. ⁵ Institut Hospital del Mar d'Investigacions Mèdiques-IMIM, Parc de Salut Mar, Barcelona, España. ⁶ Universitat Autònoma de Barcelona, Barcelona, España.

Introduction

Mechanical restraint is an intervention used for the management of agitation with the advantage of decreasing the risk of fall. However, it is a procedure that implies ethical issues and adverse effects that are often ignored. According to the literature, patients more frequently restrained are psychotic, maniac and geriatric patients.

Aims

The objective is to describe the demographic characteristics of patients that have been under mechanical restraint in Hospital del Mar from January 1 and December 31, 2016. We also want to describe the distribution in the year of the mechanical restraints and to verify if there are factors, as age, gender or diagnostic, which might have an impact on the time spent under mechanical contention.

Patients and methods

In 2016, there were 164 patients that received mechanical restraint in the brief psychiatric hospitalization unit. We have collected retrospectively data as age at the moment of contention, gender and the principal diagnosis affecting the patient, distribution by terms of the number of episodes of mechanical restraint and the total hours spent under this condition, among other variables.

A descriptive analysis and a logistic regression have been performed to study the relation between these variables.

We have used the informatics program version 21 of SPSS (IBM Corp. Released 2012. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY" IBM Corp.) to elaborate a linear regression.

Results

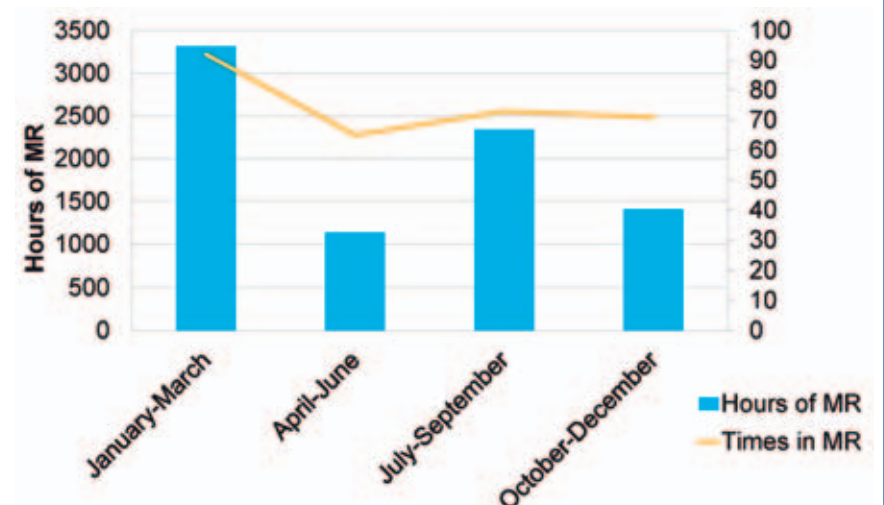
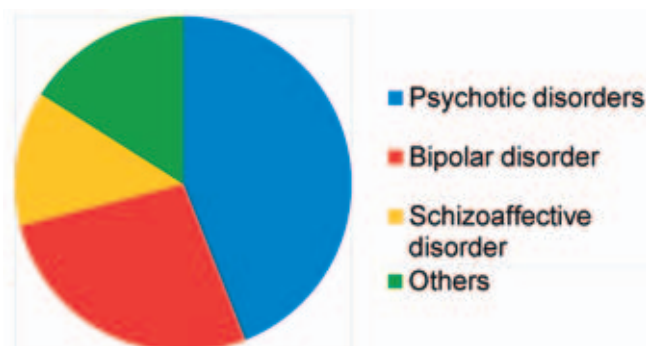
Age varies between 19 and 89 years old; the mean was 40.48 years and the standard deviation was 15.68. Men represented 56.7% of our sample and women 43.3%. About diagnoses, the three more frequent were psychotic disorders (44.3%), bipolar disorder (26.8%) and schizoaffective disorder (12.8%). From January to March, patients were under mechanical restraint for a total of 92 times, giving 3318.45 hours. The second trimester with the most time spent under mechanical restraint was from July to September with 73 moments of mechanical restraints and a total of 2344 hours. From April to June there were 65 mechanical restraints (1136.6 hours) and from October to December there were 71 mechanical restraints (1408 hours).

The older age (B: 0.89; TE: 0.35; p=0.01) and the masculine gender (B: -23.44; TE: 10.91; p=0.03) seem to be the two factors having an impact of increasing the total hours that patients stay under mechanical restraint, contrarily to the diagnosis category or the presence of psychotic symptoms that seems to have no-influence.

Gender of patients under mechanical restraint (MR), 2016



Diagnoses of patients that have been under MR



Conclusions

Our study suggests that, among variables that we have studied, both factors that influence the most the total duration of mechanical restraint are age and gender. As well, we have not found any concrete diagnosis carrying a major risk of being under physical restraint. More research is needed to identify risk factors of physical restraint and to promote new measures of prevention to minimize the number of times that patients are under this condition, but also to decrease the total time per contention.

References

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