

Multifactorial program for preventing falls in hospital at the IRCCS Rizzoli Orthopaedic Institute in Bologna

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Introduction

Hospitalization increases the risk of falling due to unfamiliar environment, medical conditions and treatments received. The fracture of the femur is the most serious complication: in 20% of cases, this type of fracture leads to immobility, and from 14% to 36% of cases leads to death within 1 year. For the organizations there are economic consequences caused by increased costs for prolonged hospitalizations, diagnostic and therapeutic procedures provided and compensations for damages. Many studies confirm the effectiveness of multifactorial interventions for preventing falls and consequent injuries in acute hospital settings.

Multifactorial Intervention

Since 2010, the IRCCS Rizzoli Orthopaedic Institute (Bologna, Italy) has launched a program of multifactorial interventions for the prevention of accidental falls for inpatients. This program included: a) the training of clinical staff, b) the application of the Morse Fall Scale for classifying the falling risk in adult inpatients, c) the care interventions for reducing fall risk factors (individual, environmental and organizational) and d) information activities for adults and pediatric patients and their families/care-givers.

Initially, the program was tested in three wards and, in 2011, it was extended to the whole hospital.

Program Assessment

It was performed a multi-dimensional program assessment by:

- monitoring outcomes (rate of falls, consequent injuries, claims) before and after intervention, by historical controls, in the years 2009 and 2011;
- verifying the correct application of the Morse Fall Scale and care interventions for reducing fall risk factors by controls on medical records;
- measuring the quality of the information provided by clinical staff by a survey among the parents of pediatric patients;
- an economic evaluation carried out by a microcosting analysis of costs of resources employed for the design and the implementation of the program.



Results

Evaluations of the two periods considered have shown an overall reduction of harm to patients (100% of moderate lesions and 87% of the severe ones) and claims (67% in the same time period).

By controls on medical records, there was a good adhesion by health personnel to the company procedure (correct application of the Morse Fall Scale in 78% of cases and care interventions in 89%).

By survey, there was a good quality level of information provided by staff to parents of pediatric patients (informations provided in 69% of cases and clarity considered "adequate" or "very adequate" by 100% of respondents).

The economic analysis showed the overall sustainability of the program implemented at a cost per inpatient of 3,71 €.

References

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