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The feature of preventable adverse events in hospitals in the State of Rio de Janeiro, Brazil☆

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ABSTRACT

Objective: To analyze the features of preventable adverse events (AEs) in hospitals inpatient in the state of Rio de Janeiro, in Brazil, in order to identify elements to serve as a substrate for priority actions aimed at improving patient safety.
Methods: Analysis of data from a baseline retrospective cohort study to assess the incidence of AEs in a sample of records in three teaching hospitals in the State of Rio de Janeiro to describe the features of preventable AEs.
Results: In a sample of 1,103 patients, were identified 65 preventable AEs of 56 patients who suffered preventable AEs. The healthcare associated infections (HAI) accounted for 24.6% of preventable AEs; surgical complications and/or anesthetic, 20.0%; damages arising from delay or failure in diagnosis and/or treatment, 18.4%; pressure ulcers, 18.4%; damage from complications of venipuncture, 7.7%; damage due to falls, 6.2%; damage as a result of the use of drugs, 4.6%. The preventable AEs were responsible for additional 373 days of hospital stay.
Conclusion: The HAI is the major preventable AE, as observed in other developing countries. Despite the limitations of the study, the characterization of preventable AEs indicates that known and effective actions available to reduce HAI, such as hand hygiene, to prevent pressure ulcers, to encourage adherence to protocol and clinical guidelines and to create continuing education programs for health professionals, should compose the list of priorities of hospital managers and health professionals involved in the care of hospitalized patients.

☆ Study conducted at Escola Nacional de Saúde Pública Sérgio Arouca, Fundação Oswaldo Cruz, Rio de Janeiro, RJ, Brazil.

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Características de eventos adversos evitáveis em hospitais do Rio de Janeiro

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RESUMO

Objetivo: Analisar as características dos eventos adversos (EAs) evitáveis em pacientes internados em hospitais do Rio de Janeiro, com vista a identificar elementos que sirvam de substrato à ações prioritariamente voltadas para melhoria da segurança do paciente.
Métodos: Análise de dados coletados no estudo de base de coorte retrospectivo para avaliação da ocorrência de EAs em uma amostra de prontuários em três hospitais de ensino do estado do Rio de Janeiro para descrever as características dos EAs evitáveis.
Resultados: Na amostra de 1.103 pacientes foram identificados 65 EAs evitáveis dos 56 pacientes que sofreram EAs evitáveis. As infecções associadas aos cuidados da saúde (IACS) representaram 24,6%; complicações cirúrgicas e/ou anestésicas, 20,0%; danos decorrentes do atraso ou falha no diagnóstico e/ou tratamento, 18,4%; úlceras por pressão, 18,4%; danos de complicações na punção venosa, 7,7%; danos devido a quedas, 6,2%; danos em consequência do emprego de medicamentos, 4,6%. EAs evitáveis foram responsáveis por 373 dias adicionais de permanência no hospital.
Conclusão: O estudo mostrou que os EAs mais frequentes são as IACS, tal como observado em outros países em desenvolvimento. Apesar das limitações do estudo, a descrição da caracterização dos EAs evitáveis indica que ações disponíveis e consagradas voltadas para diminuir as IACS, como a higienização das mãos, a prevenção a úlcera por pressão, o estímulo a adesão a protocolo e diretrizes clínicas e o estabelecimento de programas de educação continuada de profissionais de saúde, devem compor a lista de prioridades dos gestores hospitalares e dos profissionais de saúde envolvidos no cuidado ao paciente hospitalizado.

Introduction

The first study to use the method of retrospective chart review of medical records to assess the incidence of adverse events (AEs) in hospitals was the Medical Insurance Feasibility Study (MIFS), conducted in California, United States in 1974.[1] However, the study that brought to light the magnitude of the inpatient safety issues was the Harvard Medical Practice Study[2] (HMPS), conducted in 1984 in hospitals of the state of New York, United States. This study contributed to the publication of the book "To err is human",[3] which had a major impact on the American society and, subsequently, on the world. Sequentially, other investigations were conducted in the United States,[4] Canada,[5] Denmark,[6] France,[7] Australia,[8] New Zealand,[9] United Kingdom,[10] Brazil,[11] Spain,[12] Sweden,[13] Netherlands,[14] Portugal,[15] and Tunisia.[16] These studies considered that AE, pursuant to the HMPS[2] definition, an unintended injury resulting in temporary or permanent disability and/or prolonged length of stay as a consequence of health care management. Based on published empirical evidence, it is estimated that the incidence of inpatients that experience AE is approximately 10%, and that the proportion of preventable AEs is around 50% of the total AEs.[17-19] Therefore, the occurrence of an AE is a serious problem related to the safety of patients, reflecting on the quality of the care provided worldwide.

An important point to AE assessment and to the design strategies directed to improve the quality of care is the identification and awareness of the characteristics and factors that contribute to the occurrence of AEs deemed preventable.[20] However, the enhancement of knowledge and the improvement in patient safety practices are restricted by the great proliferation of definitions and terminologies. Twenty-four different definitions of the term "error" and 14 definitions of AE were found in various studies.[21] A recent systematic review described seven different definitions of preventable AE.[22] In order to standardize the definitions of the main concepts in the literature on patient safety, the World Health Organization[21] (WHO), through the Patient Safety Program, developed the International Classification for Patient Safety (ICPS), in which an incident is defined as any event or circumstance that could have resulted, or did result, in unnecessary harm to a patient.[22] In this classification, harmful incidents correspond to AEs. However, the ICPS is subsequent to and differs from most of the aforementioned studies on incidence of AE, which adopted concepts similar to those prepared in the HMPS.[2]

The occurrence of an AE does not necessarily mean that there was error in the patient care. Patients may suffer harms inherent to the health care that may not be avoided (e.g., side effects resulting from chemotherapy).