Post-Release Drug Treatment Risks: Strategies to Minimise Harm to Patients
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Abstract

This paper examines the perceptions and causes of drug treatment-related error, and suggests some risk reducing strategies. Interest in medical error surged recently, culminating with an estimate by the US Institute of Medicine in 1999 of 44,000 to 98,000 annual care-related deaths. Public media pressure elicited responses from health care providers, purchasers, internists and health professionals’ organisations. A search was made using PubMed, focusing on papers from 1980 to date giving data on trends and causes of in-hospital drug-related error. Papers with estimates of prevalence rates of drug-induced injury in large denominator populations were selected. One hundred and seven papers on drug-related error were identified; 36 clearly defined denominators and compared rates in different groups. Occurrence rates of drug-induced harm were similar (2.2% to 6.7%) in the US and British hospital surveys. The Harvard Medical Practice Study first reliably measured the frequency of care-related patient harm. More reliable and accurate information is needed on the base-line rates of drug-related injury. Whereas there are few precise estimates of drug-induced injury, the evidence suggests that between half and two-thirds of hospital-related harmful events are preventable. Most experts agree that hospitals need to change radically their approach to professional error from one of blaming individuals to overhauling the systems for monitoring, detecting and preventing drug-related error. Hospital managers should implement voluntary, non-punitive, and confidential systems for reporting error, and apply methods of safety enhancement which succeed in high-risk industries. A realistic and achievable target could be halving of current risk. Incentives can be given to event monitoring and pharmacotherapy quality assurance, to encourage timely and accurate reporting. On-line doctors’ entry of drug orders and computerised adverse event monitoring also promote error reduction.

Key words: Adverse drug event, Human error, Pharmacovigilance, Safety, Systems design

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