

Currents Trends in the Reporting of Adverse Drug Events in Australia

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ABSTRACT

In this paper the adverse effects of adverse drug events which strike public health. The aim of the paper is to evaluate the effect of ADE and improve the practice in Australia. By continuous monitoring in the health care system the usage of drugs can be reduced and help to improve public health.

KEYWORDS: ADE, safety and quality.

INTRODUCTION

In the occurrence of morbidities and mortalities, one of the significant causes entails adverse drug events (ADEs). In most cases, these events are identified post-marketing. As such, the need to improve the current state of ADE reporting cannot be overstated; as it strives to improve public health and patient safety via the utility of innovative or underutilized methods. The central purpose of this paper is to evaluate the current trends in ADE events and reporting, with particular emphasis on some of the methods through which the practice could be improved in Australia. According to the Australian Council for Safety and Quality in Health Care (2002), ADEs refer to responses to drugs that are unintended and noxious. The responses are linked to drugs that occur at doses that individuals use for the therapy, diagnosis, or prophylaxis of disease, as well as physiological function modification (Coombes, Pillans, Storie & Radford, 2001). According to Haw, Stubbs and Dickens (2014), recent global trends suggest that ADEs account for about 6.5 percent of deaths. In a developed region such as the U.S., ADEs continued to be indirectly and directly linked to an alarming rate of about 100,000 deaths annually (Nanji, Patel, Shaikh, Seger & Bates, 2016). In the context of England, recent statistical outcomes

suggest that there has been a 45-percent increase in the number of ADEs (Unver, Tastan & Akbayrak, 2012). The eventuality is that these reactions pose a major impact on public health; with the Australian Council for Safety and Quality in Health Care (2002) documenting that the events increase morbidity and mortality, besides reducing the quality of life of patients. The eventuality is that they (ADEs) impose considerable financial burdens on health care systems. To gain insights from the Australian context, some of the sources of data on which this paper relies include the Council for Health Care Standards and Patient Safety Education, the Institute of Health and Welfare, and the Australian Bureau of Statistics. Regarding the aspect of medical reviews, findings by Coombes, Pillans, Storie and Radford (2001) demonstrated that in Australia, about 2-4% of all hospital admissions are related to medication; especially among individuals aged 75 and above. For these results, the study demonstrated that the trend holds for about 30 percent of patients. Relative to routine data collections, a study by Haw, Stubbs and Dickens (2014) illustrated that medical record reviews outperform the International Classification of Disease's coding of the routine hospital discharge and death certificate data.

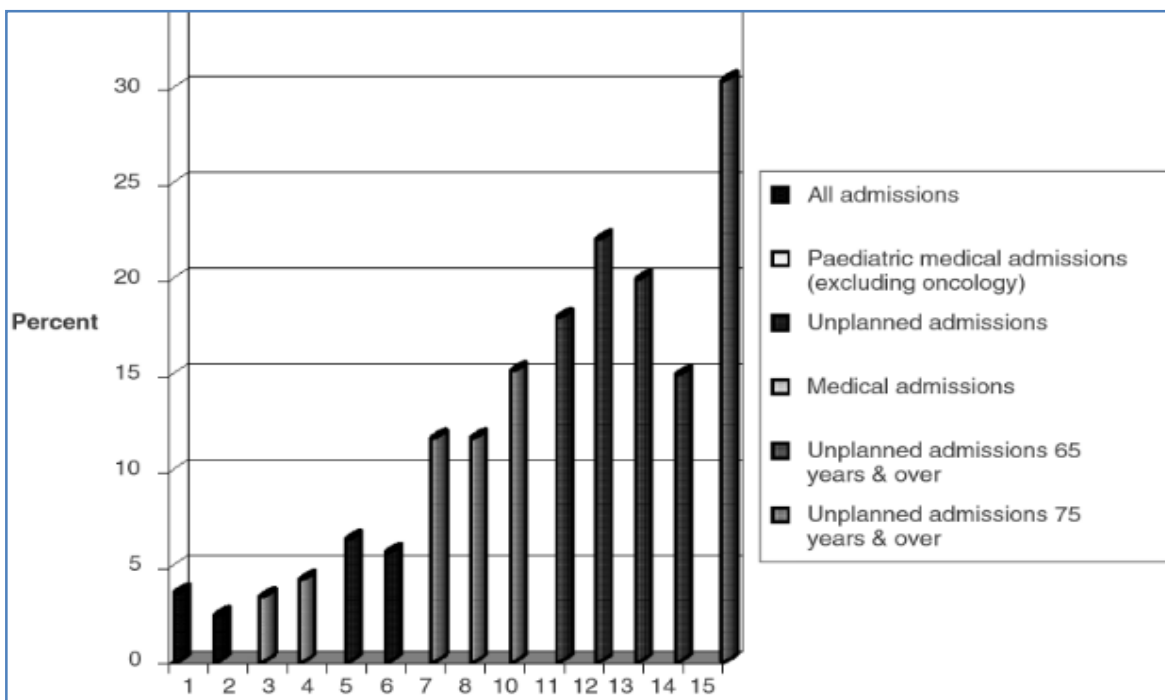


Figure 1: Trends in drug-related hospital admissions in Australia

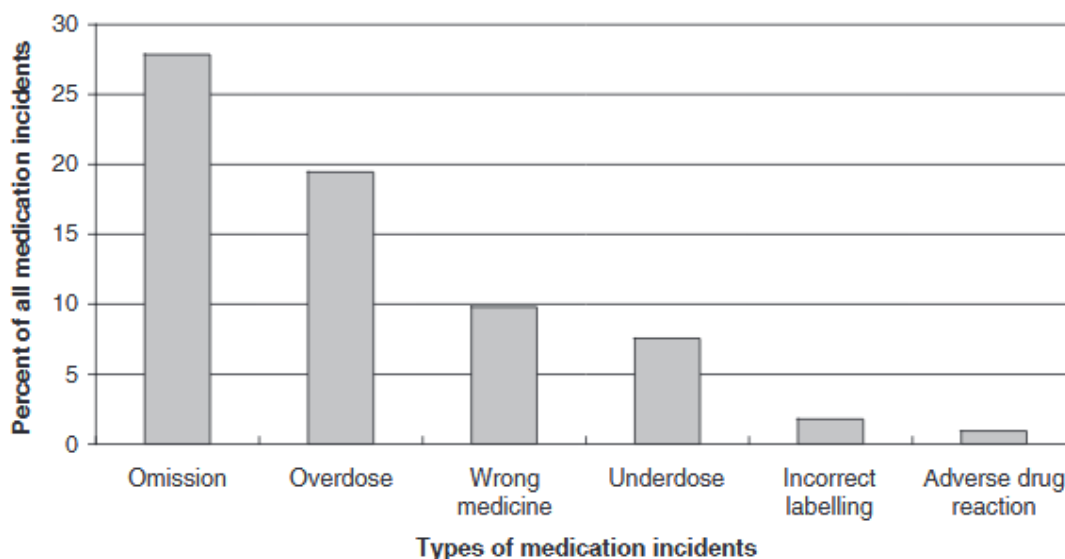


Figure 2: Types of medication incidents in Australia's health care system

As avowed by Nanji, Patel, Shaikh, Seger and Bates (2016), these avenues' results demonstrate that in Australia, ADEs account for 27% of coded adverse events; with 43% of these events identified at general practice encounters while 43% are likely to be identified at discharge. The emerging trend is that in Australia, the process of hospitalization holds that medication use and ADE rates exhibit a strong correlation. Regarding clinical indicators, many studies document that at least one percent of hospital admissions exhibit an ADE (Unver, Tastan&Akbayrak, 2012); with some hospitals failing

to report the ADEs experienced to the national collection (Australian Council for Safety and Quality in Health Care, 2002). Within an hour of presentation, Coombes, Pillans, Storie and Radford (2001) observed further that Australia's health care system holds that only 75% of patients experiencing myocardial infarction are likely to receive thrombolytics. From the insights gained from the Australian Incident Monitoring System, additional scholarly observations suggest that 50% of ADEs are likely to be linked to general practice incidents while 36% are anesthesia-related; with medication-related

ADEs documented to be about 26% (Nanji, Patel, Shaikh, Seger & Bates, 2016). Relative to recent statistical observations regarding the occurrence of errors as part of ADEs, the Australian context demonstrates that drug administrations involving ward stock systems are likely to experience errors in 15-20% of the cases while situations involving individual patient systems are likely to experience errors in 5-8% of the cases. In summary, the Australian health care system is experiencing an increasing trend in ADEs. Some of the high impact yet preventable problems that have continually been reported include cardiovascular, anti-inflammatory, and anticoagulant drugs. Indeed, these problems account for over 50% of the ADEs reported in this geographical context. As such, there is a need for the country's health care system to steer progressive improvements in the methods for ADE monitoring and prevention.

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