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Ten Years of Patient Safety Studies: A Social Network Analysis

Hung-Chi Huang[1] Yen-Der Lee[2] Pi-Ching Chen[3]

Abstract

Purposes: Patient safety is of central concern to the healthcare industry. This study maps the intellectual structure of patient safety studies over the past decade and to investigate inter-relationships. **Methods:** This study searched the *Web of Science* journal database collection and obtained data from 870 relevant articles published between 2000 and 2009. Article references were also analyzed and profiled. The study used co-citation, factor and social network analysis methods to trace the development path of and important topics in patient safety research. **Results:** Results found a patient safety literature focus on three key themes between 2000 and 2004 that included adverse events and medical errors; adverse drug events and using information technology to reduce errors; and error models and lessons from other industries. Patient safety literature published between 2005 and 2009 focused the five topics of error management, reporting systems and teamwork in medicine; using information technology to reduce errors; patient safety culture / climate; adverse drug events; and nursing staff and patient safety. This study also identified the books and journals most frequently cited in reviewed articles and analyzed them in relation to the shift in topic focus between the two time periods. **Conclusions:** This paper introduces researchers to a new approach to profiling key themes and their relationships in the field of patient safety that can assist academics and practitioners in the healthcare industry to better understand current patient safety studies.

Key words: Patient safety study, co-citation analysis, social network analysis.

Introduction

The 1999 report of the American Institute of Medicine (IOM), *To Err Is Human: Building a Safer Health System*, indicated that as many as a million patients are injured and 44,000-98,000 die in U.S. hospitals annually as a result of medical errors (cited from Kohn, Corrigan, & Donaldson, 2000). The major effect of the IOM report was to bring a number of stakeholders into action and to motivate hospitals to make the changes in practice needed to make healthcare safer (Leape, 2008). In addition, Stelfox, Palmisani, Scurlock, Orav, and Bates (2006) stated that a large rise in the number of patient safety

[1] Director, Department of Medical Management, Kaohsiung Veterans General Hospital.
[2] Professor, Graduate School of Business and Operations Management, Chang Jung Christian University.
[3] Associate Professor, Department of International Bussiness, Chang Jung Christian University.
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Address Correspondence to: Hung-Chi, Huang No.386, Dazhong 1st Rd., Zuoying Dist., Kaohsiung City 813, Taiwan (R.O.C.)