Chapter 16
Bibliometric Analysis of Patient Safety in Nursing

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ABSTRACT

Aim: The aim of the study is to analyze quantitatively the scientific literature covering nursing studies on patient safety. Method: The Web of Science database is queried in this retrospective bibliometric analysis to identify relevant publications. The study themes, contributing journals, countries, institutions, and authors were evaluated quantitatively. Thus, a total of 5470 publications concerning patient safety in nursing were included and analyzed. Findings: The number of studies conducted increased every year from 1992 to 2023. While the country whose articles receive the most citations (31072) is the United States of America (USA). Journal of Clinical Nursing, with 338 articles, appeared to have the highest number of publications, Chaboyer W. appeared to have the highest number of citations with a total of 1426 and 45 publications. The countries that have the strongest international cooperation for research in this field are the USA, England, Australia and China. Results:

1. INTRODUCTION

The World Health Organization defines patient safety as "the absence of preventable harm to the patient and reducing the risk of unnecessary harm associated with healthcare services to an acceptable minimum"(WHO, 2023). Approximately

one out of ten patients are harmed during healthcare service, and more than 3 million deaths occur annually due to unsafe care (WHO, 2023). The role of nurses in preventing practice errors and achieving safe healthcare is to protect patient from being harmed during the healthcare, no matter long or short-term (Sermeus, 2016). In addition, it is known that nurses' compliance with patient safety principles and institutional strategies is of critical importance in eliminating many causes of patient harm, such as medication errors, pressure ulcers, healthcare-associated infections, unsafe transfusion and injection practices (Doyon et al., 2020).

Patient safety is a multidimensional and multifactorial interdisciplinary research topic. It became very hard to have a comprehensive overview because of the ever-increasing rate of publications on patient safety (Rodrigues, van Eck, Waltman, & Jansen, 2014). Especially in interdisciplinary research topics, obtaining a general perspective on patient safety in the literature becomes an extremely time-consuming process (Sermeus, 2016). The frequently used method in performing these analyzes is bibliometric methodologies. Systematic reviews are prone to bias in sample selection. Bibliometric methodologies are good methods to eliminate this handicap. It is also very successful in identifying journal performance, co-authorships, co-citation trends (Waltman, Van Eck, & Noyons, 2010). This study examined patient safety in nursing through a bibliometric analysis in order to guide future patient safety research in the field of nursing and to bring an alternative approach for searching, examining and evaluating huge amounts of bibliographic data in the literature.

The aim of this study is to identify and characterize the authors, journals, and research institutions, together with the related articles, in nursing research literature in terms of patient safety, and to define thematic structure of the objected topic.

2. MATERIALS AND METHODS

The data collection framework and study design for the analysis of patient safety in nursing can be seen in figure 1.

In data collection part, articles in nursing category were filtered according to the criteria given in the lefthand side of figure1. Within 6514 articles found about nursing, after filtering the criteria, 5470 articles left to analyze. Publication type was filtered as "Article or Review Article" and then ended up with 5749 articles. Language was filtered as "English", reduced to 5567. "SCI (Science Citation Index), SCI-E (Science Citation Index Expanded), ESCI (Emerging Science Citation Index), SSCI (Social Science Citation Index)" was applied as another filter, the number of articles become 5541. Since the year has not ended yet, articles from 2024 was excluded, and the analyses is done with 5470 articles. In review, 5470 articles were examined in three parts.

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