

Landmark Publications on Sudden Infant Death Syndrome: A Bibliometric Analysis

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TABLE OF CONTENTS

INTRODUCTION	118
I. METHODS	118
II. RESULTS	119
III. DISCUSSION	120
A. Bibliometric Measures	120
B. Trends in SIDS Research	122
C. Influential Authors in the Field of SIDS	122
D. Core Journals in the Field of SIDS	122
E. Salient Findings from the Landmark Publications on SIDS	123
IV. LIMITATIONS OF THE STUDY	123
CONCLUSION	124
REFERENCES	124
ABOUT THE AUTHORS	126

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Landmark Publications on Sudden Infant Death Syndrome: A Bibliometric Analysis

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ABSTRACT: Sudden infant death syndrome (SIDS) is a poorly understood disorder, and its pathophysiology and risk factors remain unclear. Research in the area is the key to combating the pervasive prevalence of this fatal disorder. We sought to identify the top 50 articles concerning SIDS and study their bibliometric characteristics to gain an insight into the research trends in this area. Using the Scopus database, two independent reviewers conducted a literature search using a prespecified search string. Results were arranged according to the citation count, and the top 50 relevant articles were selected. No time restrictions were set, and all types of articles were included. A detailed analysis was carried out to identify the trends and characteristics of the top 50 articles. The top 50 articles were published between 1972 and 2011, with the most productive 5-year interval being 1991–1995. These 50 papers accumulated a total of 13,703 citations (median = 236 citations per paper). Among these, about 9% were self-citations. The citations received by these core papers seemed to decline post-2000. The top 50 articles were published in 21 different journals, with *Pediatrics* contributing the most ($n = 15$). US authors were listed for 60% of the articles ($n = 30$). None of the articles originated from Asian authors. Our manuscript highlights the characteristics of impactful articles on SIDS – and this can act as a directive for researchers aiming to publish on this topic. Bibliometric parameters suggest a decreasing research interest in the field of SIDS, which is concerning, and efforts should be made to promote research. Furthermore, the lack of influential research from Asian authors is also troubling. Funding should preferably be directed toward Asian researchers to bridge the gap in knowledge.

KEYWORDS: Bibliometric analysis, citations, SIDS, sudden infant death syndrome, sudden unexpected death in infancy.

INTRODUCTION

Sudden infant death syndrome (SIDS) remains one of the most intriguing mysteries in medicine. The US National Institute of Child Health and Development defines this syndrome as “the sudden death of an infant under one year of age, which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history” [82]. Although the pathophysiology of SIDS remains elusive, several risk factors have been identified including the prone sleeping position [10,11,29,73], sleeping on the same bed as parents [12], higher ambient temperatures [5,72], and the reduced use of pacifiers [31]. The identification of these risk factors in conjunction with worldwide campaigns has led to a decline in the incidence of SIDS by almost 50% [46]. Despite this, SIDS still remains the leading cause of mortality among infants aged between 1 month and 1 year in developed countries [26,27,54,77]. The persistence of SIDS is worrisome, and experts believe the disorder is unlikely to be completely eliminated until the causative mechanisms are better understood [52]. Therefore, continued research interest in this area is essential. In order to better understand research trends in the field of SIDS, we decided to conduct a bibliometric analysis.

Bibliometric analysis is a technique that examines the frequency and trends of citations in the published literature.

In the current study, we sought to employ this method to identify the 50 most impactful articles on SIDS and study their characteristics. This can provide an insight into the overall research trends in this field. Additionally, citation analysis can help identify the most influential investigators and institutions in this field, as well as areas that warrant increased research attention [50]. This information can help funding agencies effectively guide their limited resources. For example, it has been recommended that research grants should be awarded to investigators with extremely high citation counts [55]. Although this point of view is controversial [83], it appears to be the simplest method to determine worthy candidates. Evidence-based medicine suggests that staying in touch with research is valuable for practicing physicians; therefore, by compiling a list of the most noteworthy articles on SIDS, we aimed to provide pathologists and pediatricians with a resource that allows them to easily evaluate the key research work in this area.

I. METHODS

The online database Scopus (Scopus Library database, Elsevier, www.scopus.com) was used to obtain a list of the 50 most-cited articles on SIDS. Scopus has been shown to incorporate a greater number of journals and articles than other databases, proving to be a suitable choice for citation analyses [15]. A search was performed by two

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