

Original Article

Bibliometric Analysis of Randomised Controlled Studies Related to Schizophrenia in the Field of Nursing

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Abstract

Background: Randomised controlled trials are very important because they obtain results that reveal the effectiveness of interventions used by nurses

Objective: To determine the research trends of randomised controlled trials published in the field of nursing related to schizophrenia

Method: Data were obtained from studies published in the SCOPUS database before 20.08.2024. 'Schizophrenia', 'Nursing', 'Randomised controlled trial' keywords were searched and 34 studies were evaluated and analysed. The science mapping and visualisation software program VOSviewer was used in the analysis of the research.

Results: It was found that the first randomised controlled study on the subject was published in 1995, studies were frequently conducted in the United States, Turkey and the United Kingdom, Turkey had the most collaboration, studies were frequently published in the Archives of Psychiatric Nursing journal, and the number of publications tended to decrease after the pandemic.

Conclusion: It is recommended to increase publications on schizophrenia in the field of nursing and to make arrangements to increase cooperation between countries.

Keywords: Schizophrenia, nursing, randomised controlled trial, bibliometrics

Introduction

Schizophrenia is a severe, often persistent and treatment-resistant mental disorder (McCutcheon, Reis Marques & Howes, 2020). According to World Health Organisation (WHO) data, 24 million people in the world struggle with schizophrenia and other psychotic disorders (WHO, 2022). The worldwide prevalence of schizophrenia is relatively low compared to other mental illnesses, but it has the highest global burden of disability, often due to young onset, acute psychotic episodes, suicide risk and comorbidity (Charlson et al., 2018). Social differences are observed in the clinical presentation and management of the disease. Therefore, an individualised therapeutic approach is very important in treatment (Nolan, Roepke & Perreault, 2023; Brand et al., 2023). In this context, the nursing process

is a scientific and systematic clinical reasoning method that nurses use to provide comprehensive, safe and quality care (Alfaro Le Fevre Rosalinda, 2014). In addition to providing individualised patient-oriented care, the nursing process considers different perspectives by analysing, interpreting and evaluating information. It also uses scientific reasoning in situations requiring critical decision-making in the face of complex situations (Yunibhand et al., 2023). Randomised controlled trials (RCTs) are very important because they obtain results that reveal the effectiveness of interventions used by nurses (Blackwood, 2006). However, it is stated that there are few randomised controlled trials in nursing (Mantzoukas, 2009). Psychiatric nurses have important working areas related to schizophrenia such as medication and treatment compliance,

insight, positive and negative symptoms, mental status, quality of life, perceived social support, burden of care, functionality, and stigmatisation (Ozbas & Buzlu, 2011). In the health care system, it is extremely important for nurses to carry out scientific studies and integrate the results into nursing care in order to provide care in accordance with the changing needs in the process of diagnosis, treatment and rehabilitation of schizophrenia (Karagözoğlu, 2005).

Bibliometric analysis involves bringing together scientific and academic publications in line with certain criteria, standardising, classifying and interpreting the data in line with the researcher's purpose (Baker, Kumar & Pattnaik, 2020). Bibliometric analysis is becoming increasingly widespread in different disciplines in order to reveal general trends regarding any subject or field (Hallinger & Suriyankietkaew, 2018). Bibliometric studies are usually compatible with large data sets. In order to ensure high efficiency and optimise results, it is necessary to identify a single database and limit it to a time interval (Ozkan, 2024).

Previous bibliometric analyses show that schizophrenia research has increased significantly in recent years (Nuryana, Murshidi & Rahman, 2021; Fei et al.2021). Although there are many publications related to schizophrenia in different disciplines and using different study methodologies in the literature, no bibliometric analysis of randomised controlled trials related to schizophrenia in the field of nursing has been found.

This study may help to identify the gap in the field by contributing to the development of the research agenda in the field and revealing the trends and dynamics related to the subject. In addition, the data obtained can be a guide for the studies to be planned related to the subject.

Research questions

- What are the most cited authors, their publications and dates in RCTs on schizophrenia in the field of nursing?
- Which countries conduct the most RCTs on schizophrenia in the field of nursing?

- Which journals are the most frequently published RCTs related to schizophrenia in the field of nursing?
- What is the distribution of RCTs related to schizophrenia in the field of nursing according to years?
- What are the most frequently used keywords in RCTs related to schizophrenia in the field of nursing?
- Which countries are the most collaborating countries in RCT studies related to schizophrenia in the field of nursing?

Method

Purpose of the research: The aim of the study was to determine and analyse the research trends of randomised controlled trials on schizophrenia in the field of nursing from a bibliometric perspective.

Method of the research: Bibliometric analysis and science mapping method were used in the research.

Data collection: Within the scope of the research, SCOPUS database was searched on 20.08.2024 without any year limitation. For this purpose, 'Schizophrenia', 'Nursing', 'Randomised Controlled Study' keywords were used. As a result of the search, 179 studies were found. Titles and abstracts were evaluated, and after excluding studies involving different disciplines and methods, the remaining 34 studies were analysed.

Analysing the data: VOSviewer, a science mapping and visualisation software program, was used to analyse the data.

Ethical considerations: Since the data of this study were obtained from studies published in the literature, ethics committee approval was not required. The study was conducted in accordance with the Declaration of Helsinki.

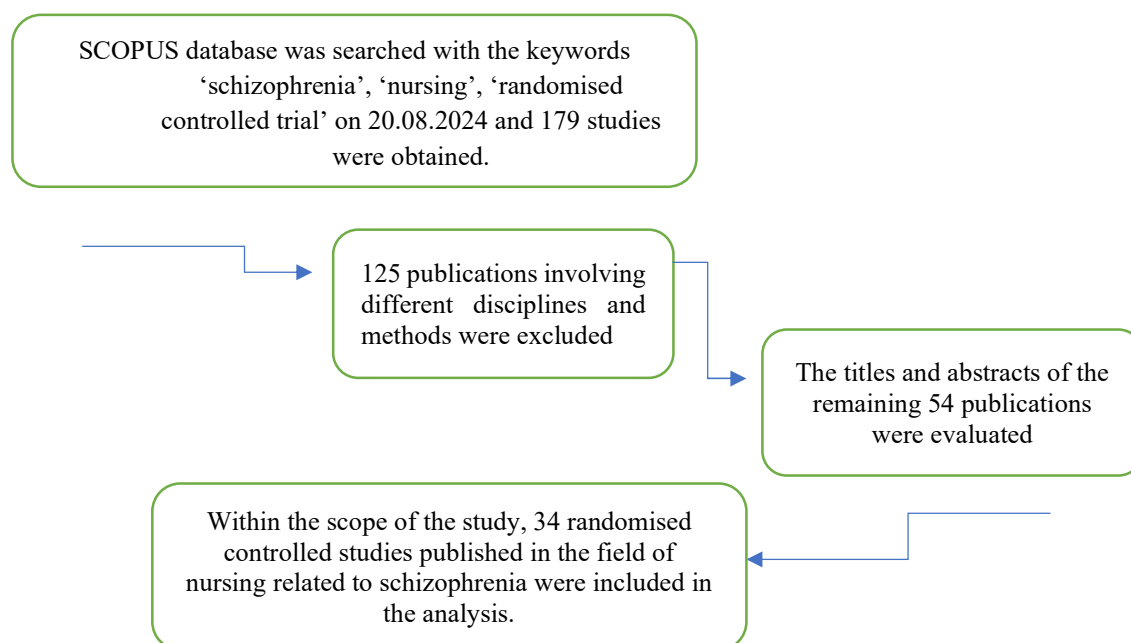
Results

Among the published studies, the most cited authors were Maneesakorn S. et al. (N:57), Chu C.- I et al. (N:48), Chen, W.-C et al. (N:48), Chien,W.T. et al. (N:46) and Anderson K.H. et.al. (N:44), respectively (Table 1).

The countries with the highest number of publications are United States, Turkey, United Kingdom, Taiwan and Hong Kong, respectively (Table 2). The most frequently

published journals were Archives of Psychiatric Nursing, Perspectives in Psychiatric Care, Journal of Advanced Nursing, Journal of Psychosocial Nursing and Mental Health Services and Issues Mental Health Nursing (Table 3). It was found that

Research methodology



The most frequently used keywords were schizophrenia, randomised controlled trial and psychiatric nurse, respectively (Figure 1).

Turkey was identified as the country with the most frequent country cooperation (Figure 2).

Discussion

In this study in which randomised controlled trials published in the field of nursing on schizophrenia were examined, study trends and outputs related to the subject were evaluated. The most cited authors and their publications, the journals in which the studies are published most frequently, the number of publications by years, author and country collaborations are very important in terms of having information about the developments in practice as well as being a new research source.

According to a systematic review, schizophrenia patients have many needs including mental recovery, disease

the first RCT on the subject was conducted in 1995 and the publications showed a disproportionate distribution according to years and the number of publications tended to decrease in recent years (Table 4).

management, life management, crisis management, family support, social participation, etc. (Liu, Rong & Lee, 2012). In this study, Manaesakorn S. et al. is the most cited author and studied compliance therapy with schizophrenia patients and obtained significant results on psychotic symptoms, attitude towards medication and medication satisfaction. In other analysed studies, interventions such as animal assisted activity, progressive muscle relaxation training, and support activities for families were included. The fact that the author received many citations from the aforementioned study may be associated with the fact that treatment compliance is affected by many parameters due to the nature of the disease.

The countries with the highest number of publications on the subject are the United States of America, Turkey, England, Taiwan and Hong Kong, respectively. This situation

may be related to the importance and financial resources given to the subject by both developed and developing countries, as well as social expectations, needs and the individual, familial and social outcomes of schizophrenia. Burns et al. reported that the risk of schizophrenia increased in countries with significant differences in income distribution (Burns, Tomita & Kapadia, 2014). However, socioeconomic indicators can support research productivity in countries, so it can be said that there is a need to increase the studies related to the subject, especially in developing countries.

Archives of Psychiatric Nursing has been identified as the journal with the highest number of publications related to the subject. This journal covers theory, practice, education, research and policy applications related to special populations, mental health disciplines related to mental health and psychiatric nursing with a broad perspective. It has been reported that all major journals publishing schizophrenia research are written in English and therefore have a wide readership and high h-index. However, it is stated that English articles are more likely to be cited than articles published in other languages (Di Bitetti & Ferreras, 2017).

Table 1. The most cited authors and their publications in RCTs published in the field of nursing related to schizophrenia

Author	Citation (N)	Sources	Year	Name of Article
Maneesakorn, S.et al.	57	Journal of Clinical Nursing	2007	An RCT of adherence therapy for people with schizophrenia in Chiang Mai, Thailand
Chu, C.-I. et.al.	48	Journal of Psychosocial Nursing and Mental Health Services	2009	The effect of animal-assisted activity on inpatients with Schizophrenia
Chen, W.-C., et al.	48	Journal of Clinical Nursing	2009	Efficacy of progressive muscle relaxation training in reducing anxiety in patients with acute schizophrenia
Chien, W.T. et al.	46	Journal of Advanced Nursing	2005	Effectiveness of a mutual support group for families of patients with schizophrenia
Anderson, K.H.et al.	44	International Journal of Mental Health Nursing	2010	An exploratory, randomized controlled trial of adherence therapy for people with schizophrenia

Table 2. Countries with the highest number of RCT publications on schizophrenia in the field of nursing

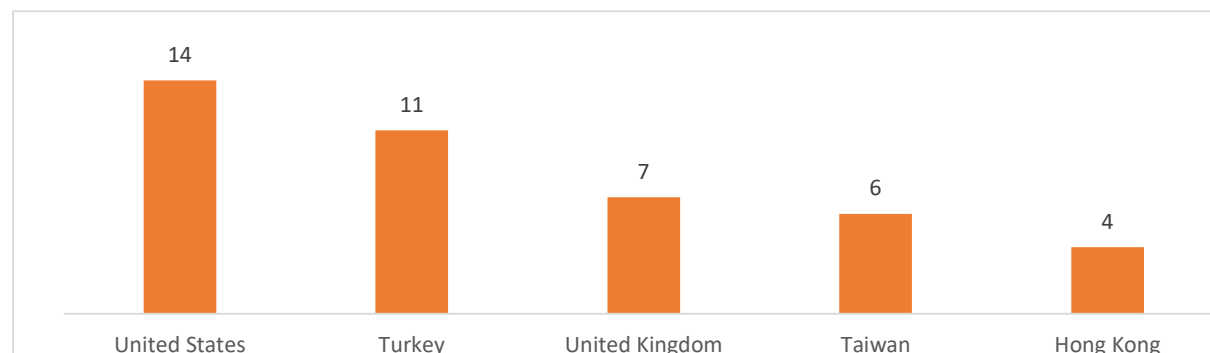


Table 3. Journals with the highest number of RCT publications related to schizophrenia in the field of nursing

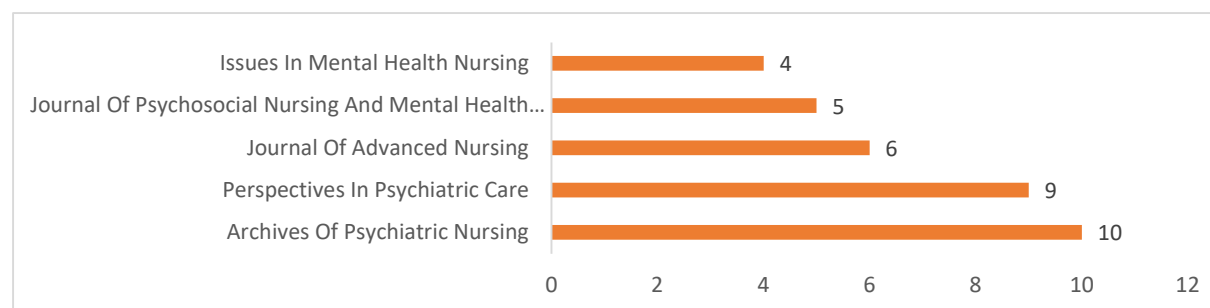


Table 4. Distribution of RCT studies published on schizophrenia in the field of nursing according to years

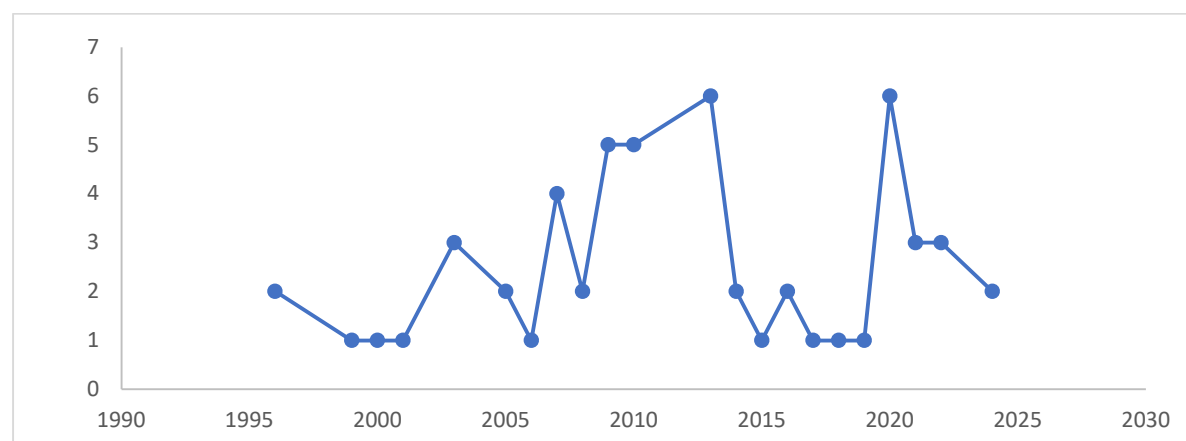


Figure 1. Keywords

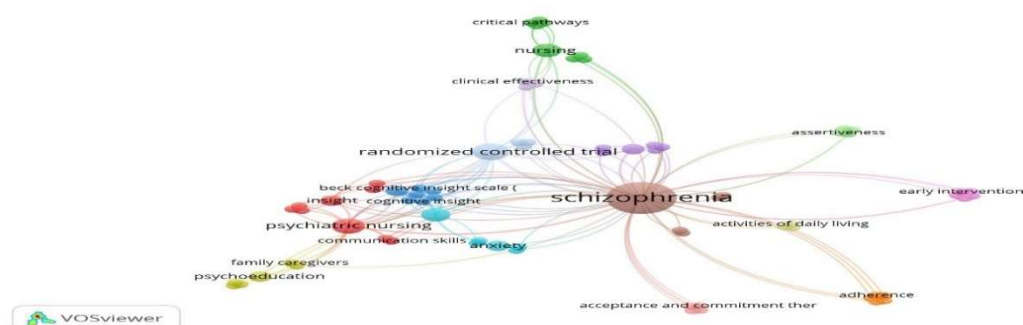
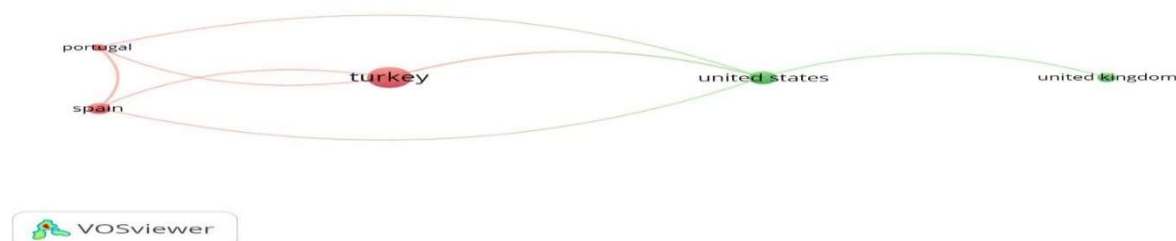


Figure 2. Country co-operation



It was found that RCTs published in the field of nursing related to schizophrenia showed a disproportionate distribution according to years, and the number of publications that increased during the pandemic process tended to decrease after the pandemic. There are many factors that may cause the disease to worsen during the pandemic process. These can be listed as fear caused by the pandemic, stress, virus infection, isolation of virus-infected patients (Kozloff et al., 2020). The continuity of psychiatric care and treatment during the pandemic process was considered as an important indicator for the prognosis of the disease, and therefore, studies may have focused on the pandemic process. The reason for the decrease in the number of studies on the subject in recent years may be associated with the change in the study trends of the authors.

Keywords are the first step in conceptualising the research methodology of an article as well

as strategising for publication (Yanbing et al., 2020). Keyword analysis provides an understanding of research trends by reflecting current and fundamental topics (Liu, Zhang & Kishimoto, 2021). In this context, the outputs obtained are important to examine what kind of studies have been conducted on the subject. In the study, keywords were collected in eleven clusters. These clusters were also used jointly with the keyword 'schizophrenia'. In addition, 'psychiatric nursing' and 'randomised controlled trial' were determined as frequently used keywords in the studies on the subject. It is important for researchers to use common concepts related to the subject both in terms of ensuring language unity and reaching more readers. One of the aims of psychiatric nurses is to provide holistic care in line with the needs of patients diagnosed with schizophrenia (Bayrak & Gurhan, 2022).

It has been reported that experimental studies published in the field of nursing have

increased in the last two decades and the majority of the studies are randomised controlled trials (Baldi et al., 2014). Considering these results, the intensive use of these keywords can be considered as usual. In RCT publications related to schizophrenia in the field of nursing, it has been determined that country cooperation is frequently carried out in Turkey, the United States of America and the United Kingdom. The incidence of schizophrenia is higher in developed countries (McGrath et al., 2008), but underreporting of cases may also occur in developing countries (Holla & Thirthalli,

2015). However, it has been reported that countries that are more open to cooperation tend to produce more scientific articles than less open countries (Tantengco, 2021; Muriithi, Horner & Pemberton, 2013). In this context, it can be said that cooperation with developed countries has an important role in increasing the scientific activity and research productivity of developing countries.

Conclusion and Recommendations: As a result of the study, it was determined that RCT publications related to schizophrenia in the field of nursing tended to decrease after the pandemic. In line with these results, it is recommended to increase the number of studies. In addition, it is recommended to make political, financial and strategic arrangements that will ensure the expansion of cooperation between developed and developing countries regarding schizophrenia studies.

Limitations: This research is limited to research articles published in the SCOPUS database in English language before 20.08.2024 and the keywords used. Another limitation is that studies that are not open to access cannot be included in the research.

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