ORIGINAL ARTICLE

Scientific response to the 2023 Kahramanmaraş earthquake: A bibliometric study

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ABSTRACT

BACKGROUND: On February 6, 2023, Türkiye experienced two devastating earthquakes with epicenters in Pazarcık and Elbistan, measuring 7.7 and 7.6 on the Richter scale. These earthquakes resulted in over 50,000 deaths and widespread destruction of infrastructure. The disaster triggered a large-scale humanitarian crisis, presenting significant medical and psychological challenges. Understanding the scientific response to such events is crucial for enhancing future disaster preparedness and management.

METHODS: A systematic search was conducted in the Web of Science database using the terms "Kahramanmaraş earthquake," "Pazarcık earthquake," "Elbistan earthquake," and "Türkiye earthquake 2023." The search covered literature published from February 6, 2023 onward, and focused on medical publications. A total of 371 articles were initially identified; after excluding geological, engineering, and social science studies, 350 articles were included. Bibliometric analysis was performed using the Bibliometrix package in R Studio and visualized with Biblioshiny. Key indicators analyzed included publication volume, citation count, author collaboration, and thematic clustering.

RESULTS: The analysis identified 350 articles published in 173 journals, with contributions from 1,739 authors. The average number of co-authors per document was 6.03, indicating a high level of collaboration. However, only 5.429% of the studies involved international authors. The annual growth rate of publications was -11.11%, suggesting a projected decline in research activity. The most cited article was Emergency Medicine Association of Turkey Disaster Committee Summary of Field Observations of February 6th Kahramanmaraş Earthquakes, which emphasized the challenges faced in emergency response. Psychological studies were more numerous; however, publications related to emergency response and trauma care received higher citation counts. Keyword analysis revealed a focus on trauma care, post-traumatic stress disorder (PTSD), surgical management, and public health. Notable clinical advancements included the SAFE-QUAKE (Seismic Activity Forecasting and Evaluation–QUAKE) scoring system for predicting dialysis needs and the Mangled Extremity Severity Score (MESS) for amputation triage.

CONCLUSION: The research response to the Kahramanmaraş earthquakes followed a clear progression: an early focus on emergency response and public health, followed by injury and surgical management, and a later emphasis on psychological recovery. Despite a strong domestic research effort, low international collaboration hindered broader knowledge exchange. Sustained funding, enhanced global partnerships, and integrated mental health and trauma care strategies are essential for improving future disaster preparedness and healthcare system resilience.

Keywords: Bibliometric analysis; disaster response; Kahramanmaraş earthquake; post-traumatic stress disorder; trauma care.

INTRODUCTION

On February 6, 2023, Türkiye experienced one of the most destructive earthquakes in its history.[1] Two major earthquakes struck the Kahramanmaraş region, with epicenters in Pazarcık and Elbistan.[2] The first earthquake, measuring 7.7 on the Richter scale, occurred early in the morning and was followed approximately nine hours later by a second quake of 7.6

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magnitude. These earthquakes caused widespread devastation across southern Türkiye and northern Syria, resulting in over 50,000 fatalities and tens of thousands of injuries.[3] Thousands of buildings collapsed, and critical infrastructure such as hospitals, roads, and power grids suffered severe damage. The immediate aftermath was marked by a large-scale humanitarian crisis, as search and rescue operations were hindered by harsh winter weather and logistical challenges.[4,5] Beyond the physical destruction, the psychological trauma experienced by survivors and first responders underscored the long-term social and mental health consequences of the disaster.[6]

Major disasters such as earthquakes, tsunamis, and hurricanes have consistently shaped the scientific landscape.[7] When such catastrophic events occur, researchers across various disciplines mobilize to investigate their causes, impacts, and the effectiveness of response efforts.[8] Scientific output following major disasters often focuses on structural engineering, emergency medicine, psychological trauma, disaster response efficiency, and long-term recovery strategies.[9] Historical examples include the surge in research following the 2011 Tōhoku earthquake and tsunami in Japan, and the 2004 Indian Ocean earthquake and tsunami. These events prompted significant advancements in early warning systems, urban planning, and disaster management protocols.[10] Similarly, the Kahramanmaraş earthquakes have generated a significant body of research, particularly in the medical field, with a focus on trauma care, surgical management, and post-disaster healthcare infrastructure.[11]

Bibliometric analysis is a method used to evaluate and map trends in scientific literature through quantitative approaches. By analyzing publication data from databases such as Web of Science, bibliometric analysis enables the visualization of research trends, citation patterns, and thematic clusters. It can also reveal gaps in the literature and highlight emerging areas of research.[12] In the context of disaster research, bibliometric analysis serves as a valuable tool for assessing the global academic response, understanding the key themes driving research, and identifying opportunities for future investigations.[13]

This study aims to conduct a bibliometric analysis of scientific publications related to the 2023 Kahramanmaraş earthquake. The objective is to explore research trends, author collaboration networks, influential publications, and thematic patterns within the emerging body of literature following the disaster. The study seeks to provide a comprehensive overview of the scientific response to the earthquake, identify knowledge gaps, and suggest potential directions for future research. By analyzing the academic response, this study aims to contribute to the development of more effective disaster management and healthcare strategies.

MATERIALS AND METHODS

Source and Retrieval Strategy for Literature

A systematic search was conducted using the Web of Science database to identify research articles related to the 2023 Kahramanmaraş earthquake. The search query included the terms "Kahramanmaraş earthquake," "Pazarcık earthquake," "Elbistan earthquake," and "Türkiye earthquake" within the title, abstract, and keywords. To maintain focus on healthcare-related research, the search was limited to medical literature. The time frame began on February 6, 2023, and the search was performed on March 5, 2024.

The initial search yielded 371 articles. Two researchers independently reviewed all articles to assess their relevance to the medical field. Studies focusing on geological or structural aspects of the earthquake, as well as those in the social sciences, were excluded. The review process involved analyzing titles and abstracts, and, when necessary, the full text of each article. After applying the exclusion criteria, 350 articles were included in the final analysis (Figure 1). Most of the excluded studies focused on engineering, geological analysis, or general disaster management strategies rather than medical topics.

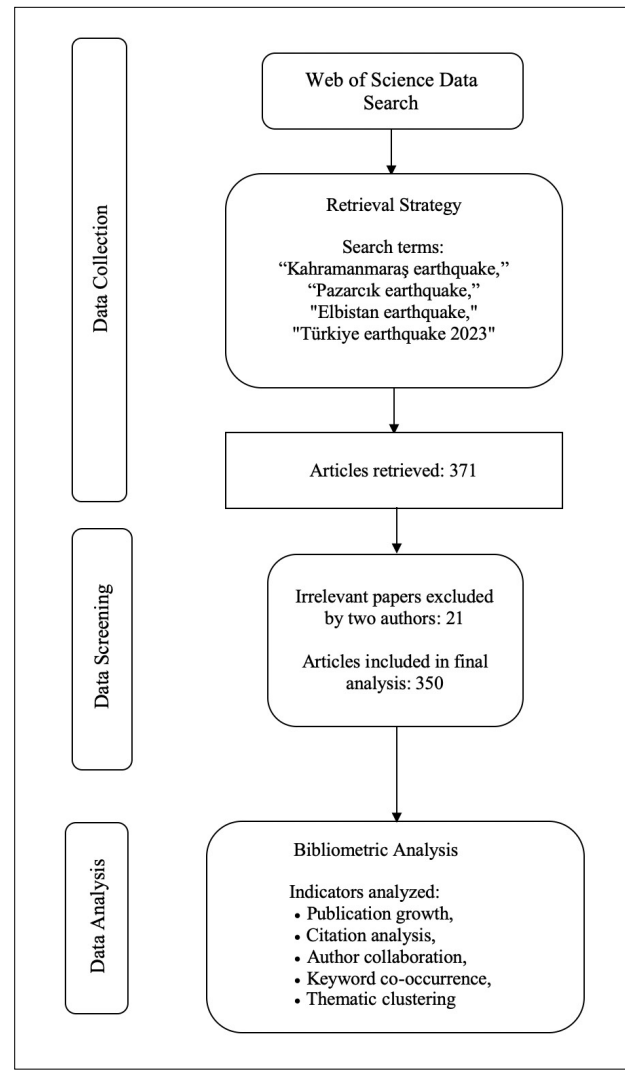

Figure 1. Flowchart for the bibliometric analysis of the Kahramanmaraş earthquake.

Figure 2. A total of 350 documents were analyzed, sourced from 173 publications. Only 17 were single-authored, indicating a strong preference for collaborative research (average of 6.03 co-authors per document). However, international collaboration remains limited at 5.43%, suggesting that most partnerships are local or national.

Year	Articles
2023	81
2024	205
2025	64

Figure 3. Annual scientific production related to the 2023 Kahramanmaraş earthquake (2023–2025). A significant spike in publications occurred in 2024 (205 articles), with lower outputs in 2023 (81 articles) and 2025 (64 articles).

Data Analysis

Bibliometric analysis was performed using the Bibliometrix package in R Studio, and the results were visualized using Biblioshiny. Key bibliometric indicators, including publication volume, citation count, author collaboration networks, and keyword co-occurrence, were analyzed. Descriptive statistics and network maps were generated to provide an overview of the research landscape. Citation analysis was conducted to identify the most influential articles and authors. Co-authorship networks were mapped to examine collaboration patterns among researchers and institutions. Keyword analysis was used to identify frequently studied topics and emerging research themes. Additionally, thematic analysis was performed to explore the clustering of research themes and their evolution over time. This methodological approach provided a comprehensive view of the academic response to the Kahramanmaraş earthquake, highlighting key contributors and identifying gaps within the field.

RESULTS

Figure 2 summarizes the main bibliometric indicators for research related to the Kahramanmaraş earthquake from 2023 to 2025. A total of 350 documents were identified, published across 173 different sources. The analysis included contributions from 1,739 authors, with only 17 single-author publications, indicating a high level of collaboration among researchers. The average number of co-authors per document was 6.03, reflecting a collaborative research environment. However, international collaboration was relatively low, with only 5.429% of documents featuring authors from more than one country. The annual growth rate of publications was -11.11%, suggesting a decline in research output over the study period. The documents had an average age of 1.05 years and received an average of 1.829 citations per publication. A total of 778 distinct author keywords were identified, underscoring the wide range of research topics covered in the literature.

Annual Scientific Production

2023: The modest number of the publication in the year of the earthquake likely reflects the time lag inherent in academic publishing, as research initiation, peer review, and publication processes often delay the appearance of articles in databases (Fig. 3).

2024: The surge in publications aligns with typical post-disaster research dynamics, where scholarly attention peaks 1–2 years after the event, as studies are completed, funded projects conclude, and interdisciplinary collaborations mature.

2025: The projected decline (assuming data completeness) may indicate a tapering of immediate post-disaster research activity. However, this trend could also result from incomplete data collection for the year or a shift toward long-term studies that have not yet been published.

This trend highlights the rapid mobilization of academic efforts following catastrophic events, with peak productivity occurring during the intermediate recovery phase. The drop in 2025 emphasizes the need for sustained funding and interdisciplinary engagement to address long-term impacts, including socio-economic recovery, infrastructure resilience, and psychological trauma. The annual growth rate of -11.11% was calculated by comparing the number of publications across the year, indicating a decrease in research output, likely influenced by the shift in focus toward local recovery efforts and logistical constraints.

Most Relevant Sources

The most productive journal was Disaster Medicine and Public Health Preparedness, with 30 publications, highlighting its central role in disaster-related research (Fig. 4).

Other notable sources included Current Psychology (16 publications), International Nursing Review (13 publications), and Ulusal Travma ve Acil Cerrahi Dergisi – Turkish Journal (12 publications), reflecting a broad range of research fields, including mental health, nursing, and trauma surgery.

Specialized journals such as Prehospital and Disaster Medicine (11 publications) and Joint Diseases and Related Surgery (9 publications) also made significant contributions. The presence of journals like BMC Public Health (7), International Journal of Social Psychiatry (7), American Journal of Emergency Medicine (5), and BMC Emergency Medicine (5) underscores the diverse scope of research on the Kahramanmaraş earthquake, spanning emergency response, public health, and social impacts.

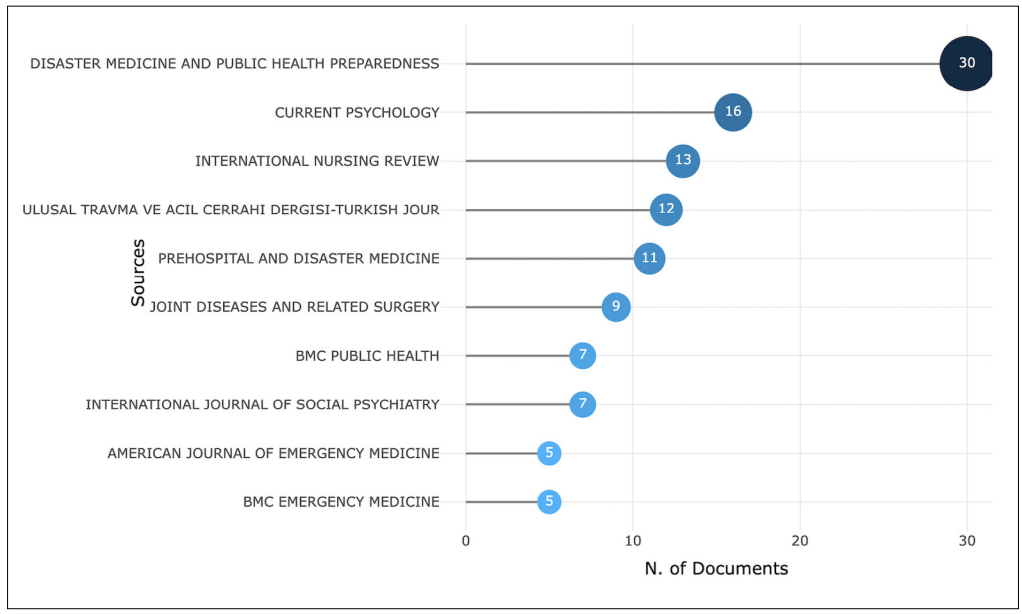

Figure 4. Most relevant sources publishing research on the Kahramanmaraş earthquake. The x-axis represents the number of documents published, and the y-axis lists journal names.

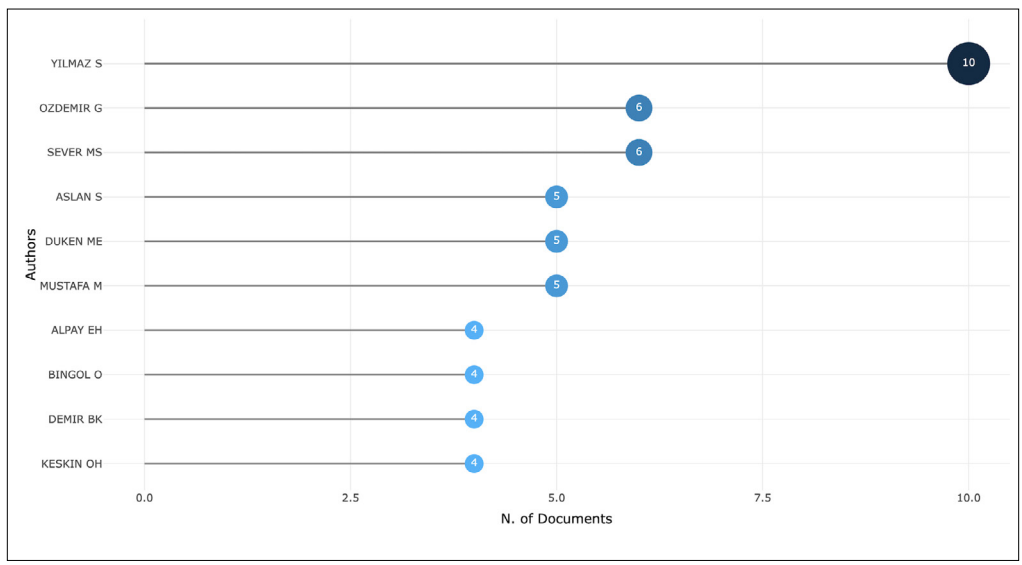

Figure 5. Most productive authors contributing to research on the 2023 Kahramanmaraş earthquake. Note: The clarity of this figure is limited due to unlabeled metrics and formatting inconsistencies.

This distribution suggests that the scientific response extended beyond immediate disaster relief to encompass the psychological, social, and medical consequences of the earthquake.

Most Relevant Authors

Figure 5 presents the most productive authors contributing to research on the Kahramanmaraş earthquake. The x-axis indicates the number of documents published, while the y-axis lists the authors' names.

Yılmaz S is the most productive author, with 10 publications, highlighting a significant contribution to the field. Ozdemir G and Sever MS follow with six publications each, indicating active involvement in this research area. Aslan S, Duken ME, and Mustafa M have each contributed five publications, demonstrating a consistent level of research output. Authors such as Alpay EH, Bingol O, Demir BK, and Keskin OH have each published four documents, reflecting a solid contribution to the research landscape.

Authors' Production Over Time

Figure 6 illustrates the publication timeline of the most pro-

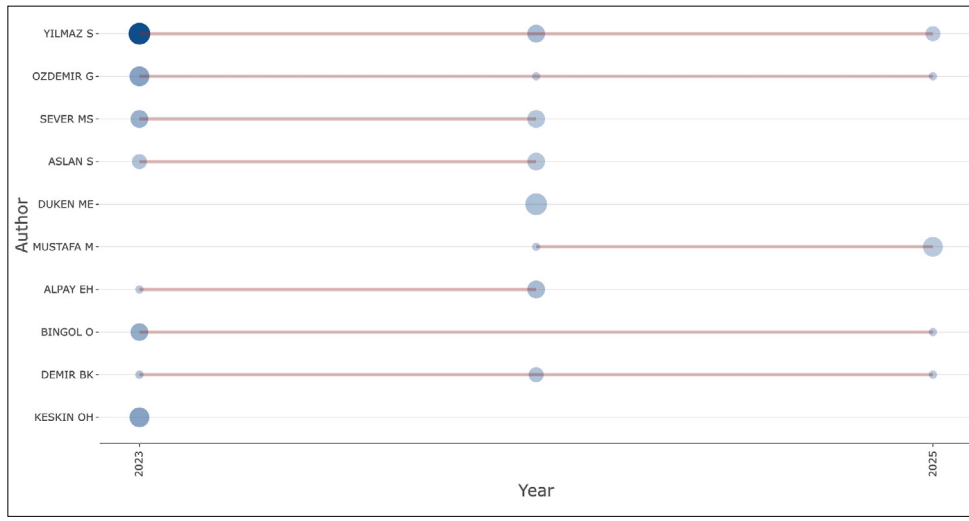

Figure 6. Temporal distribution of scholarly contributions by authors researching the 2023 Kahramanmaraş Earthquake.

ductive authors involved in Kahramanmaraş earthquake research between 2023 and 2025.

The x-axis represents the publication year (2023 to 2025), while the y-axis lists the authors. The size of the bubbles reflects the number of publications by each author in a given year.

Yılmaz S demonstrates consistent and substantial output, with the largest bubble appearing in 2023 and another notable contribution in 2025. Ozdemir G, Sever MS, and Aslan S have contributed steadily over the years, with notable publications in both 2023 and 2025. Duken ME, Mustafa M, and Keskin OH show larger bubbles in 2025, suggesting increased research activity in that year. Bingol O and Alpay EH also demonstrate consistent but smaller research outputs, with most of their activity concentrated in 2023 and some follow-up work in 2025.

The overall pattern indicates that research output peaked in 2023 and is projected to maintain momentum through 2025.

Authors' Local Impact

The highest local impact was observed for Yılmaz S, with an H-index of 6, indicating that six of their publications have been cited at least six times. Ozel M followed with an H-index of 4, reflecting a strong citation influence. Several authors, including Ak R, Keskin OH, Ozdemir G, and Tatlıparmak AC, had an H-index of 3, suggesting consistent contributions with moderate citation impact. Authors such as Akpınar E, Aksoy I, Alpay EH, and Asfuroğlu ZM had an H-index of 2, indicating emerging influence within the research field. These findings highlight that a small group of highly cited authors accounts for a significant portion of the scholarly impact in this research domain (Fig. 7).

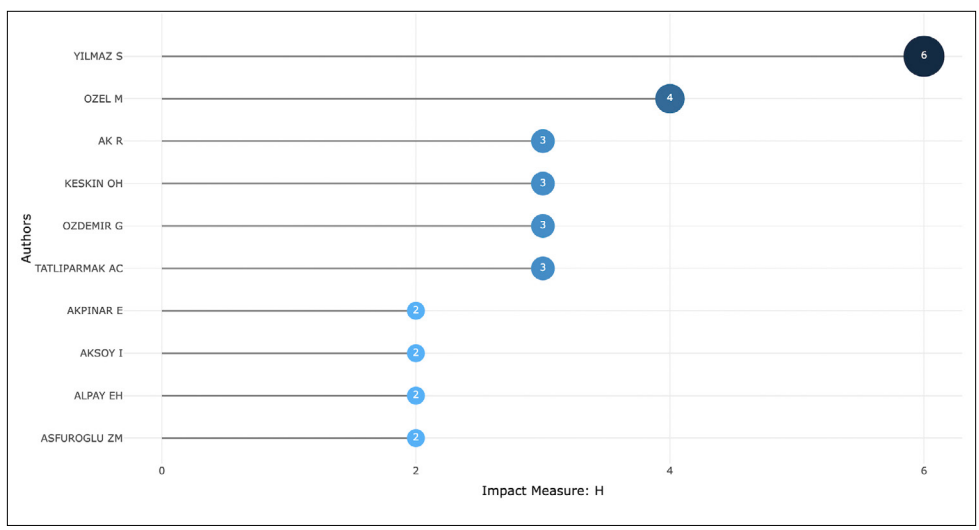

Figure 7. Local impact of authors contributing to research on the Kahramanmaraş earthquake, measured by H-index scores.

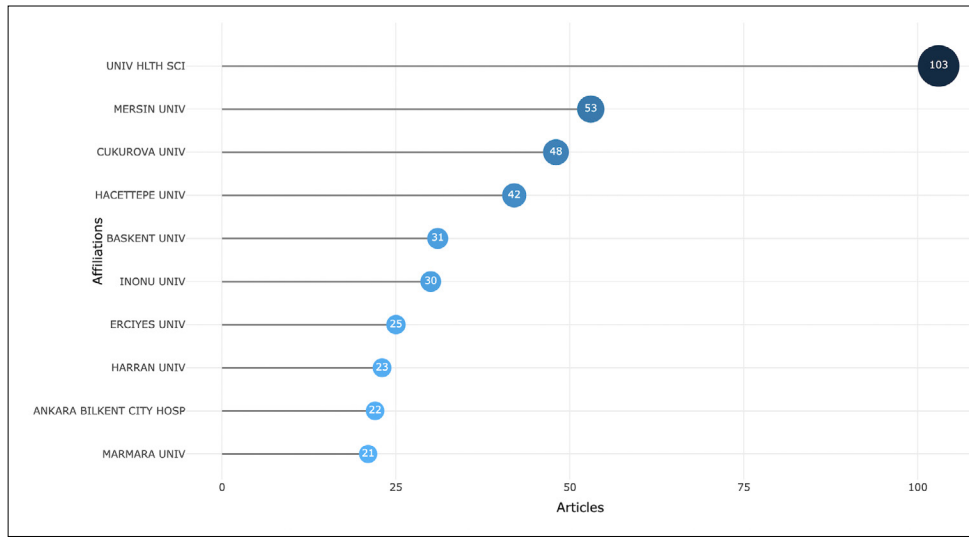

Figure 8. Top contributing institutions to the 2023 Kahramanmaraş earthquake research. The figure highlights the involvement of predominantly Turkish universities and hospitals, reflecting localized academic engagement.

Most Relevant Affiliations

Figure 8 displays the top contributing affiliations in Kahramanmaraş earthquake research, measured by the number of published articles. The x-axis represents the number of articles, while the y-axis lists the affiliations. UNIV HLTH SCI leads with a dominant output of 103 articles, significantly higher than any other institution. MERSIN UNIV (53 articles), CUKUROVA UNIV (48 articles), and HACETTEPE UNIV (42 articles) follow as major contributors. BASKENT UNIV (31), INONU UNIV (30), and ERCIYES UNIV (25) demonstrate moderate but consistent research activity. Additional contributors include HARRAN UNIV (23), ANKARA BILKENT CITY HOSP (22), and MARMARA UNIV (21), reflecting a balanced distribution of research efforts across various institutions.

The size of the bubbles represents the research impact or volume, with UNIV HLTH SCI standing out as the most influential contributor. This distribution suggests that earthquake-related research is concentrated among a few high-output institutions, with a long tail of moderate contributors.

Most Globally Cited Documents

The document with the highest number of citations is authored by Yılmaz S (2023) in Prehospital and Disaster Medicine, with 35 global citations, indicating substantial international recognition and influence. This is followed by Sarı H (2023) in the same journal, with 23 citations, and İlhan B (2023) in the American Journal of Emergency Medicine, with 18 citations. Other notable contributions include works by Kundakçı B (2023) in the Journal of Orthopaedic Surgery and Research (17 citations), and Tuğlular S (2023) in Nephrology Dialysis Transplantation (16 citations). Additional impactful publications by Mavrouli M, Ozel M, Ozdemir G, and Kulakoğlu B reflect the broad dissemination of earthquake-related research across various disciplines. These findings underscore the global scientific impact of studies on the Kahramanmaraş earthquake, highlighting key contributors and influential works.

The bibliometric analysis identified several highly cited articles that have significantly shaped the scientific discourse surrounding the 2023 Kahramanmaraş earthquake (Fig. 9). The most cited article, titled "Emergency Medicine Association of Turkey Disaster Committee Summary of Field Observations of February 6th Kahramanmaraş Earthquakes," provides a comprehensive overview of the initial field response and outlines the major challenges faced by emergency responders.[14] This article has been widely referenced for its in-depth analysis of the logistical, medical, and operational difficulties encountered in the immediate aftermath of the disaster.

Another influential article, "First-Week Analysis after the Turkey Earthquakes: Demographic and Clinical Outcomes of Victims," focused on the early clinical outcomes of those affected.[15] It examined the demographic characteristics of the injured population and identified patterns in trauma and emergency medical care needs. This study has been instrumental in informing healthcare strategies for future disaster response planning.

The psychological impact of the disaster was explored in "Prevalence and Associated Risk Factors of Post-Traumatic Stress Disorder Among Survivors of the 2023 Turkey Earthquake," which examined the mental health consequences of the earthquake.[16] The study identified key risk factors for post-traumatic stress disorder (PTSD) and emphasized the importance of providing long-term psychological support for survivors.

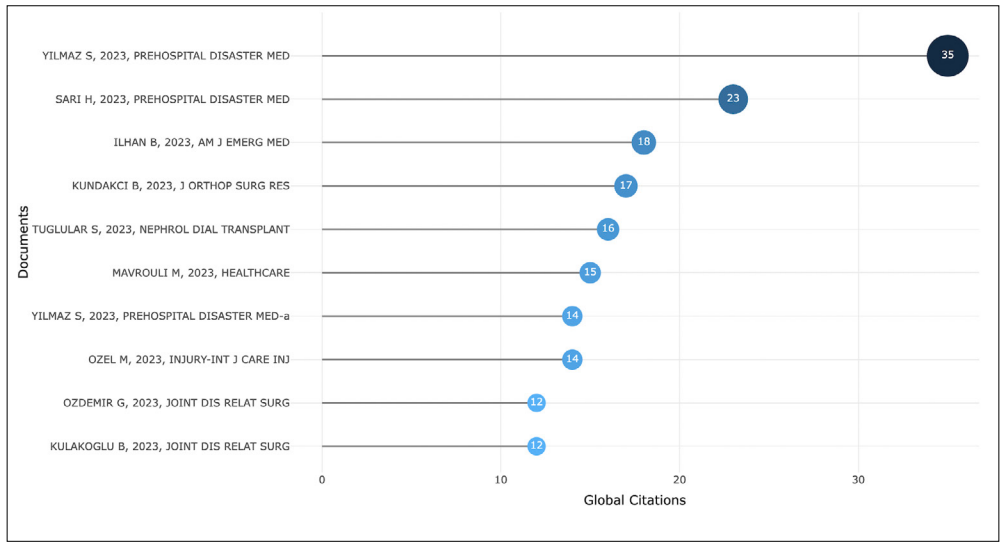

Figure 9. Most globally cited documents related to the Kahramanmaraş earthquake.

Surgical and orthopedic challenges were highlighted in "6 February 2023, Orthopedic Experience in Kahramanmaraş Earthquake and Surgical Decision in Patients with Crush Syndrome." This study detailed the clinical management of crush syndrome and the decision-making process involved in limb preservation versus amputation.[17]

Public health concerns were addressed in "An Emerging Health Crisis in Turkey and Syria After the Earthquake Disaster on 6 February 2023: Risk Factors, Prevention and Management of Infectious Diseases", which discussed the heightened risk of communicable diseases following the disaster. The article proposed strategies for infection control and vaccination to mitigate the emerging health crisis.[18]

Advancements in triage and injury management were presented in "Enhancing Triage and Management in Earthquake-Related Injuries: The SAFE-QUAKE Scoring System for Predicting Dialysis Requirements," which introduced a novel scoring system for predicting dialysis needs in patients with crush injuries. This article has contributed to improving clinical decision-making in disaster settings.[19]

The role of surgical triage was also examined in "The Role of Mangled Extremity Severity Score in Amputation Triage in a Transport Health Facility with Catastrophic Earthquake Admissions," which assessed the effectiveness of the Mangled Extremity Severity Score (MESS) in guiding amputation decisions.[20]

Collectively, these highly cited studies reflect the diverse and multifaceted nature of the medical response to the Kahramanmaraş earthquakes. They have provided valuable insights into trauma care, emergency response, psychological impact, and public health management, shaping both clinical practice and future research directions.

Word Cloud of Research Themes

The analysis of Kahramanmaraş earthquake-related research reveals a strong focus on the psychological and social impacts of the disaster. Frequently studied terms include post-traumatic stress disorder (PTSD), victims, symptoms, survivors, and disaster (Fig. 10). The prominence of mental health-related keywords such as depression, anxiety, trauma, and prevalence underscores the significant psychological burden experienced by survivors. Additionally, the presence of medical terms like acute renal failure, crush syndrome, and rhabdomyolysis indicates that the physical health consequences of earthquakes are also a major research focus. Comparative references to previous disasters, such as the Marmara and Wenchuan earthquakes, suggest that researchers are drawing on lessons from past events to inform current understanding. The emphasis on terms such as management, predictors, risk factors, and complications reflects ongoing efforts to identify key determinants of health outcomes and improve post-disaster care and response strategies.

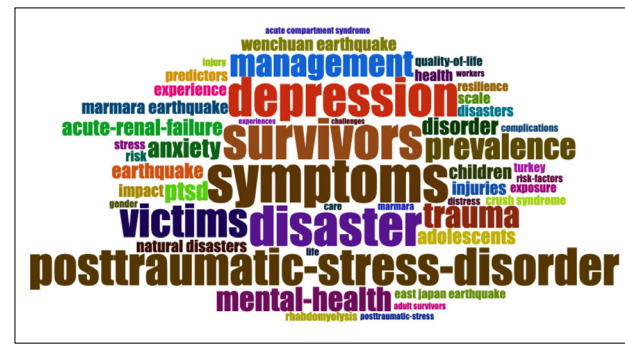

Figure 10. Word cloud of research themes. This figure synthesizes key themes and terminology prevalent in the scholarly literature on the 2023 Kahramanmaraş earthquake, based on article keywords and abstracts.

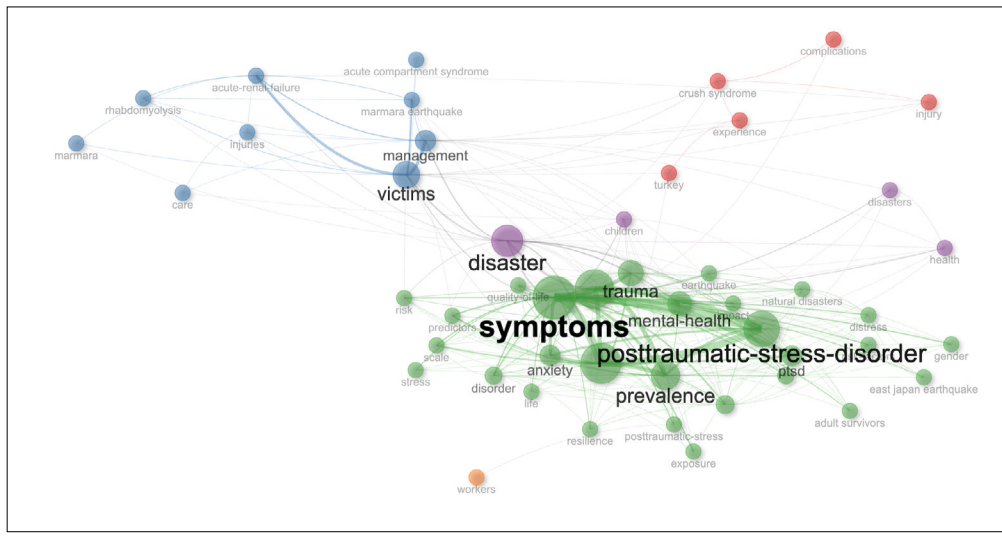

Figure 11. Co-occurrence network of keywords from studies related to the Kahramanmaraş earthquake.

Figure 11 illustrates the co-occurrence network of keywords from the analyzed studies on the Kahramanmaraş earthquake. The network reveals distinct thematic clusters, highlighting the primary focus areas within the existing literature. The largest cluster, shown in green, centers around mental health outcomes, with "symptoms" and "post-traumatic stress disorder (PTSD)" emerging as the most frequently co-occurring terms. This suggests that a substantial portion of the research emphasizes the psychological impact of the earthquake, including trauma, anxiety, and resilience.

The blue cluster highlights medical and physical health issues, with key terms such as "acute renal failure," "rhabdomyolysis," and "management" reflecting the clinical challenges faced by earthquake victims. The purple cluster focuses on disaster-related themes, including "disaster," "victims," and "management," indicating an emphasis on emergency response and healthcare system coordination. The red cluster includes terms related to complications and injuries, such as "crush syndrome" and "injury," suggesting a focus on trauma care and surgical outcomes.

The size of the nodes corresponds to the frequency of keyword occurrence, with larger nodes such as "symptoms" and "post-traumatic stress disorder" indicating greater relevance within the dataset. The thickness of the edges reflects the strength of co-occurrence between terms, with the strongest connections observed among mental health-related and disaster management keywords. This network analysis highlights the multidisciplinary nature of research on the Kahramanmaraş earthquake, encompassing both psychological and medical outcomes.

Disciplinary Distribution of Research

This treemap in Figure 12 illustrates the distribution of research topics related to the Kahramanmaraş earthquake across various medical disciplines. Emergency Medicine is the most studied field, with 48 publications, emphasizing the

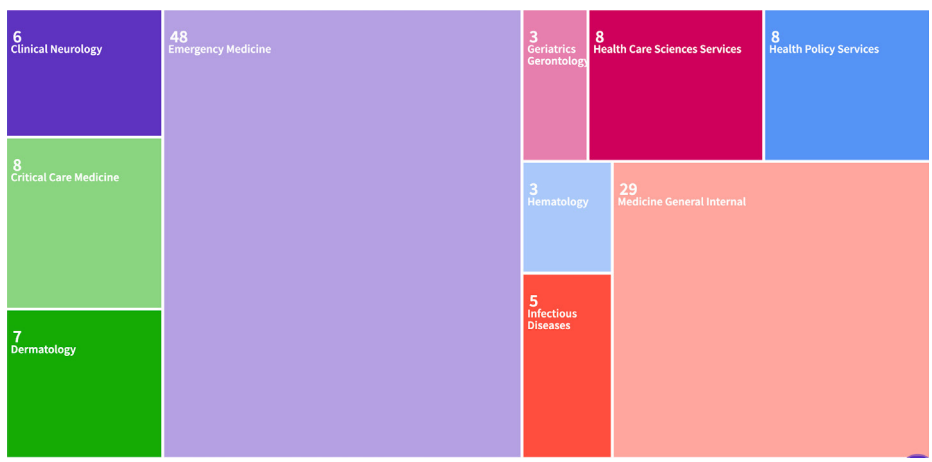

Figure 12. This figure categorizes scholarly contributions on the 2023 Kahramanmaraş earthquake across various medical and health-related fields.

immediate medical response and management challenges following the disaster. General Internal Medicine follows with 29 studies, indicating a significant focus on the broader medical complications faced by survivors. Other prominent areas include Health Policy & Services and Health Care Sciences & Services (eight studies each), reflecting interest in the healthcare system's response and policy implications. Research in Critical Care Medicine (8), Clinical Neurology (6), and Infectious Diseases (5) underscores the complexity of managing both acute and chronic health issues in the post-disaster context. Smaller but notable contributions are seen in Dermatology (7), Geriatrics/Gerontology (3), and Hematology (3), suggesting that while the primary focus remains on emergency and internal medicine, a diverse array of medical specialties is also engaged in addressing the health impacts of the disaster.

DISCUSSION

This bibliometric analysis provides an overview of the scientific response to the 2023 Kahramanmaraş earthquakes, highlighting key research trends and influential publications. The increase in publications in 2024 reflects the typical post-disaster research surge.

The most cited article, Emergency Medicine Association of Turkey Disaster Committee Summary of Field Observations of February 6th Kahramanmaraş Earthquakes, outlined critical challenges in emergency response, emphasizing the need for improved logistical coordination and medical preparedness. Similarly, First-Week Analysis after the Turkey Earthquakes offered valuable insights into trauma patterns and clinical outcomes, informing strategies for future emergency response efforts.

Mental health emerged as a major area of focus. The study Prevalence and Associated Risk Factors of PTSD Among Survivors highlighted the long-term psychological impact of the disaster, reinforcing the importance of sustained mental health support. Surgical and orthopedic challenges were addressed in studies on crush syndrome and amputation triage, underscoring the need for structured surgical protocols in disaster settings.

The low international collaboration rate of 5.429% in Türkiye's disaster-related research can be attributed to challenges such as limited access to international funding, language barriers that hinder global collaboration, and an academic ecosystem that is not yet fully integrated into global disaster research networks.

To enhance international cooperation in disaster research, Türkiye should increase participation in global conferences and research networks, improve access to international funding opportunities, implement language support initiatives, and strengthen bilateral and multilateral research partnerships with countries that have well-established disaster research programs.

Keyword analysis identified trauma care, mental health, and disaster response as dominant themes, with emerging areas including rehabilitation and healthcare system resilience.

This study provides a comprehensive overview of the academic response to the Kahramanmaraş earthquakes, emphasizing the need for sustained research funding, strengthened international collaboration, and the integration of mental health and public health strategies into future disaster preparedness efforts.

CONCLUSION

Key studies have provided valuable insights into emergency response challenges, clinical outcomes, and psychological impacts. The development of predictive scoring systems and structured triage protocols represents important progress in the field of disaster medicine. Despite strong domestic collaboration, the limited rate of international participation underscores the need for broader global research partnerships. Sustained funding and interdisciplinary collaboration will be essential for addressing long-term recovery challenges and enhancing future disaster preparedness.

The academic response to the 2023 Kahramanmaraş earthquakes followed a clear chronological pattern. In the immediate aftermath, research focused on emergency response and public health management, addressing challenges related to triage, trauma care, and infectious disease control. This was followed by a phase emphasizing injury patterns and surgical management, particularly in cases involving crush syndrome and amputation decisions. In the later stage, research shifted toward mental health, with increasing attention to PTSD and psychological recovery. Although psychological studies were more numerous, publications on emergency response and trauma care received higher citation counts, reflecting their immediate clinical relevance and impact on disaster management strategies.

Ethics Committee Approval: Ethical committee approval was not required for this study.

Peer-review: Externally peer-reviewed.

Authorship Contributions: Concept: M.S.S., S.D.; Design: M.S.S., S.D.; Supervision: Ş.B.; Resource: M.S.S., E.E.; Materials: M.S.S., E.E.; Data collection and/or processing: M.S.S., E.E.; Analysis and/or interpretation: S.D., M.S.S.; Literature review: E.E., S.D.; Writing: M.S.S.; Critical review: Ş.B.

Conflict of Interest: None declared.

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ORİJİNAL ÇALIŞMA - *ÖZ*

2023 Kahramanmaraş depremine bilimsel yanıt: Bir bibliyometrik çalışma

AMAÇ: 6 Şubat 2023'te Türkiye, Pazarcık ve Elbistan merkezli, sırasıyla 7.7 ve 7.6 büyüklüğünde iki yıkıcı deprem yaşadı. Bu depremler, 50.000'den fazla ölüme ve altyapıda geniş çaplı yıkıma yol açtı. Bu afet, büyük ölçekli bir insani kriz tetikleyerek ciddi tıbbi ve psikolojik zorluklar yaratmıştır. Bu tür olaylara bilimsel yanıtı anlamak, gelecekteki afet hazırlıklarını ve yönetimini geliştirmek için önemlidir.
GEREÇ VE YÖNTEM: Web of Science veri tabanında "Kahramanmaraş depremi," "Pazarcık depremi," "Elbistan depremi" ve "Türkiye depremi 2023" terimleriyle sistematik bir arama yapılmıştır. Arama, 6 Şubat 2023 tarihinden itibaren yapılmış ve tıbbi literatüre odaklanmıştır. Başlangıçta 371 makale tespit edilmiştir, bunlardan 350 tanesi jeoloji, mühendislik ve sosyal bilimler alanındaki çalışmalardan çıkarıldıktan sonra dahil edilmiştir. Bibliyometrik analiz, R Studio'daki Bibliometrix paketi kullanılarak yapılmış ve Biblioshiny ile görselleştirilmiştir.
BULGULAR: Analiz, 173 dergiden 350 makale tespit etmiş ve 1.739 yazarın katkısı olduğu bulunmuştur. Her belge başına ortalama yazar sayısı 6.03 olup, yüksek oranda iş birliğini göstermektedir. Ancak, çalışmaların yalnızca %5.42'sinde uluslararası yazarlar yer almıştır. Yayınların yıllık büyüme oranı -%11 olarak belirlenmiş ve bu, araştırma faaliyetlerinde öngörülen bir azalmayı göstermektedir. En çok atıf yapılan makale, Türkiye Acil Tıp Derneği Afet Komitesi tarafından yazılan "6 Şubat Kahramanmaraş Depremlerinin Saha Gözlemleri Özeti" başlıklı makale olup, acil müdahale zorluklarını vurgulamaktadır. Psikolojik çalışmalar daha fazla sayıdayken, acil müdahale ve travma bakımına ilişkin yayınlar daha yüksek atıf almıştır. Anahtar kelime analizi, travma bakımı, PTSD, cerrahi yönetim ve halk sağlığına odaklanıldığını göstermiştir. Diyaliz ihtiyacını tahmin etmek için kullanılan SAFE-QUAKE skorlama sistemi ve amputasyon triajı için Mangled Extremity Severity Score (MESS) gibi klinik gelişmeler dikkat çekicidir.
SONUÇ: Kahramanmaraş depremlerine yönelik araştırma yanıtı, belirgin bir desen izledi: İlk olarak acil müdahale ve halk sağlığına odaklanıldı, ardından yaralanma ve cerrahi yönetim, son olarak ise psikolojik hasara vurgu yapıldı. Güçlü bir yerel araştırma çabasına rağmen, düşük uluslararası iş birliği, daha geniş bilgi alışverişini sınırlamaktadır. Sürekli finansman, artırılmış küresel iş birliği ve entegre edilmiş mental sağlık ve travma bakım stratejileri, gelecekteki afet hazırlıklarını ve sağlık hizmetlerinin direncini iyileştirmek için önemlidir.

Anahtar sözcükler: Bibliyometrik analiz; Kahramanmaraş depremi; travma bakımı; travma sonrası stres bozukluğu.

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