

Original Article

MAPPING RESEARCH TRENDS AND IDENTIFYING GAPS IN SUICIDE LITERATURE DURING THE COVID-19 PANDEMIC FROM 2020 TO 2023: A BIBLIOMETRIC ANALYSIS

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ABSTRACT

Suicide is a major global public health concern, and the coronavirus disease 2019 (COVID-19) pandemic has had a substantial impact on mental health worldwide. This study provides a comprehensive bibliometric analysis of global trends and identifies gaps in the literature on suicide during the COVID-19 pandemic from 2020 to 2023 using data retrieved from the Scopus database. Bibliometric analysis was conducted using Python, BiblioMagika, Biblioshiny, and VOSviewer, and a total of 2232 relevant articles were identified. The findings show a concentration of research output in high-income countries, particularly the United States, the United Kingdom, and Canada, highlighting substantial geographical disparities. In contrast, low- and middle-income countries with high suicide rates, particularly those in Africa and Southeast Asia, remain underrepresented. The University of Melbourne, the University of Toronto, and the University of California emerged as major hubs for mental health research, with extensive international collaboration networks. High-impact journals, especially the International Journal of Environmental Research and Public Health, Frontiers in Psychiatry, and the Journal of Affective Disorders, dominated the publication landscape. The analysis also highlights the limited prominence of longitudinal research and themes related to protective factors and resilience. Addressing these gaps may help strengthen the evidence base for suicide research and prevention during future global crises.

KEYWORDS: COVID-19, suicide, suicide behaviour, mental health, bibliometric analysis

INTRODUCTION

The coronavirus (COVID-19) pandemic presented a major global public health challenge, with approximately 703 million individuals diagnosed with COVID-19 and more than 6.9 million deaths reported worldwide by the end of 2023 (1). In addition to the high morbidity and mortality associated with COVID-19, the pandemic also had a substantial negative effect on mental health and well-being across the globe (2). The pandemic has also had significant effects on suicide rates in various regions and populations. In the early months of the pandemic, Japan experienced a decrease in suicide rates. However, a significant rise was observed in 2020, particularly among women and young people (3). In addition, South Korea experienced an increase in suicide rates during the pandemic (4), and in India, there were reports of increased suicide related to the economic and social pressures caused by the pandemic (5).

Suicide rates have increased during pandemics in the past, as major infectious outbreaks have historically been linked to significant mental health consequences, including suicide. The 2003 severe acute respiratory syndrome (SARS) pandemic was associated with an increase in suicide rates among older adults in Hong Kong (6). Similarly, after the emergence of the influenza A (H1N1) pdm09 virus in 2009, a substantial positive association was reported between influenza-like illnesses and suicide deaths in South Korea (7). Risk factors for suicide during the COVID-19 pandemic included socio-demographic, behavioural, health-related, COVID-19-related, and psychopathological stressors (5). The pandemic also hampered access to mental health care and raised concerns about an increase in suicidal behaviour associated with the crisis (8).

The COVID-19 outbreak has significantly impacted mental health and has been accompanied by a marked increase in studies on suicide during the pandemic. However, the overall research landscape on suicide during COVID-19 remains insufficiently mapped. Mapping research is a crucial step in identifying trends, gaps, and areas requiring further attention. A systematic mapping of the literature can help ensure that future research contributes meaningfully to knowledge development and provides a more balanced and comprehensive understanding of the field.

Bibliometric analysis is particularly useful for examining publication patterns, influential contributors, collaboration networks, and thematic developments within a research field. It enables the conversion of large volumes of bibliographic information into quantitative evidence that can be used to assess research strengths, emerging topics, and knowledge gaps (9). In addition, periodic bibliometric analysis can provide useful insights for researchers, journal editors, reviewers, and policymakers by supporting more objective and evidence-informed decision-making (10,11).

Therefore, a global bibliometric analysis of the scientific literature related to suicide during the COVID-19 pandemic is needed. This study aimed to analyse the global scientific literature on suicide during the COVID-19 pandemic from 2020 to 2023, with a particular focus on geographical distribution, affiliations, journals, and keywords to identify research trends and gaps.

MATERIALS AND METHODS

Data source and search strategy

A literature-based descriptive study incorporating bibliometric analysis was conducted. The electronic Scopus database was used to identify literature on suicide during the COVID-19 pandemic, published globally from 1 January 2020 to 31 December 2023. Although COVID-19 was officially declared a pandemic in March 2020, the search period began on 1 January 2020 to capture the earliest publications related to the emerging outbreak and its potential association with suicide and suicidal behaviour. The eligibility criteria included: (1) English language articles, (2) original articles published between 1 January 2020 and 31 December 2023; and (3) studies focused on suicide during the COVID-19 pandemic.

Extensive phrase searching using Boolean operators, related terms, and filters was applied to identify as many relevant articles as possible. The primary key phrases focused on the most common terms used in the literature for COVID-19, including COVID-19, Coronavirus, Corona virus, 2019-nCoV, SARS-CoV, MERS-CoV, Severe Acute Respiratory Syndrome, and Middle East Respiratory Syndrome (12). The secondary key phrases focused on suicide and the most commonly used and recommended nomenclature related to suicidal behaviours, including suicidal attempt, self-harm, suicidal ideation, death wishes, suicidal plan, suicide, and depress (13). These terms were retained to improve search sensitivity and to capture relevant suicide-related literature indexed using broader or related terminology (13–15). The search was conducted in Scopus using the TITLE-ABS-KEY field with the following query: ((TITLE-ABS-KEY ("COVID-19" OR "Coronavirus" OR "Corona virus" OR "2019-nCoV" OR "SARS-CoV" OR "MERS-CoV" OR "Severe Acute Respiratory Syndrome" OR "Middle East Respiratory Syndrome") AND TITLE-ABS-KEY ("suicide" OR "suicidal attempt" OR "suicidal ideation" OR "death wishes" OR "suicidal intent" OR "self-harm" OR "suicidal thought" OR "suicidal plan" OR "depress")) AND PUBYEAR > 2019 AND PUBYEAR < 2024). Because Scopus relies primarily on keyword-based indexing rather than controlled vocabulary, multiple related terms and synonyms were used to improve comprehensiveness.

The Scopus search results were exported as a dataset, including citation information (authors, document title, year of publication, source title, volume, issue, pages, citation count, source, and document type) and bibliographic information (affiliations, editors, and keywords), into Microsoft Excel 2023 and Mendeley version 1.19.8. Mendeley was used to identify duplicates before further data cleaning, harmonisation, and analysis.

Next, records were screened for eligibility. The screening process was conducted by the study team based on the predefined eligibility criteria. Titles and abstracts were reviewed to assess their relevance to suicide during the COVID-19 pandemic. Records were excluded if they were not related to the study topic, were not original articles, were non-English publications, or were not in the final publication stage.

Data analysis

Bibliometrics is a quantitative statistical approach used to analyse the distribution and characteristics of scientific publications (16). For data analysis, this study used Microsoft Excel 2023, Python, BiblioMagika (17), OpenRefine, VOSviewer (18), R, and RStudio with Biblioshiny (19). Microsoft Excel 2023, BiblioMagika and Python were used for initial data cleaning and management. OpenRefine was used to harmonise country names, affiliations, author names, and author keywords (20,21). VOSviewer was used to generate network visualisations of co-authorship and keyword co-occurrence. For country co-authorship analysis, a minimum threshold of five documents was applied, while keyword co-occurrence analysis used a minimum threshold of ten occurrences. Biblioshiny, the web interface of the Bibliometrix R package, was used for advanced keyword analysis, including thematic mapping.

RESULTS

Publication database analysis

A total of 3869 articles were identified, of which 1637 were excluded because they were not related to the research topic, belonged to other document types (such as scoping reviews, systematic reviews, meta-analyses, and preprints), or were not in the final publication stage. In total, 2232 publications met the eligibility criteria. Over the four years, these publications received 45 300 citations, with 1911 cited papers, an average of 20.30 citations per paper, 41.92 citations per year, and 2.72 citations per author, as shown in Table 1.

Table 1. Citation metrics

Main information	Data
Publication years	2020 - 2023
Total publications	2232
Citable year	4
Number of contributing authors	13 345
Number of cited papers	1911
Total citations	45 300
Citation per paper	20.30
Citation per cited paper	23.70
Citation per author	2.72
Author per paper	7.46
Citation sums within h-Core	27 570
h-index	90
g-index	166

Source: Generated by the author(s).

World Health Organization geographical regions mapping and collaboration networks of publications.

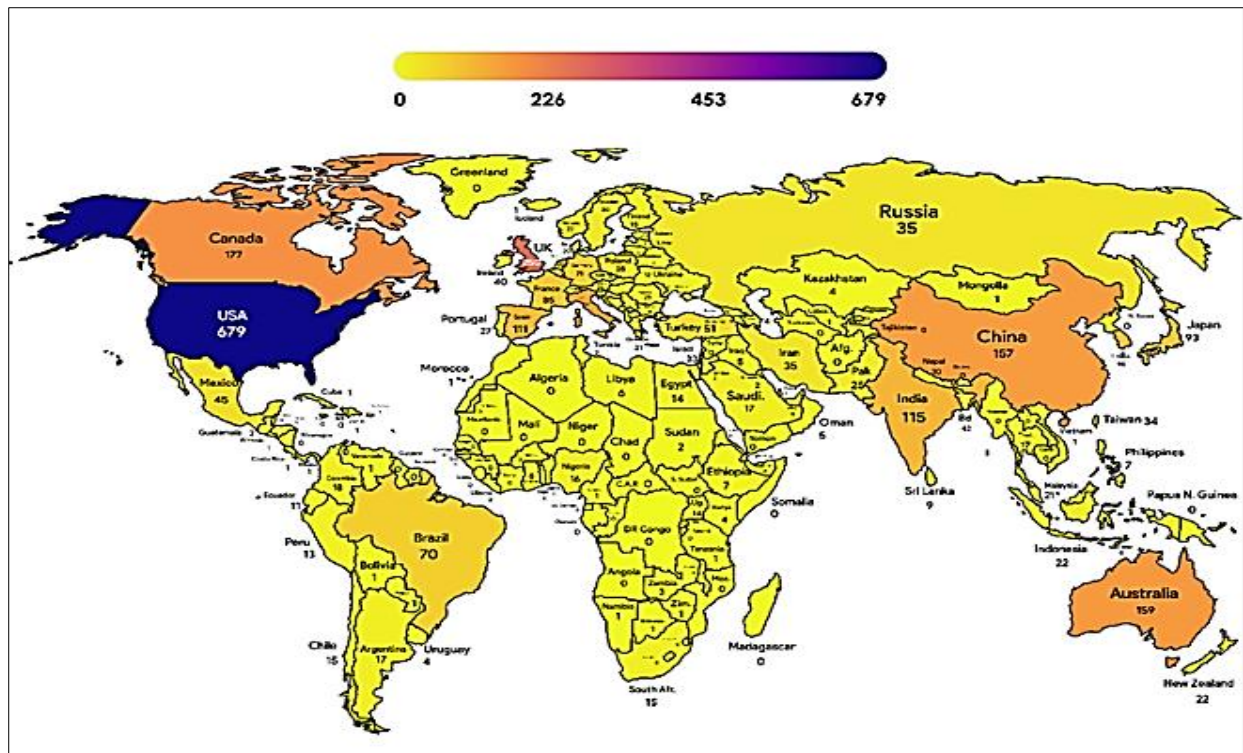
Overall, the publications originated from 125 countries. The United States (USA) had the highest number of articles (n = 679), followed by the United Kingdom (n = 250), Canada (n = 177), Australia (n = 159), China (n = 157), Italy (n = 137), India (n = 115), and Spain (n = 111). All remaining countries

published fewer than 100 articles. In terms of total citations, the USA also showed a substantial advantage over the other countries.

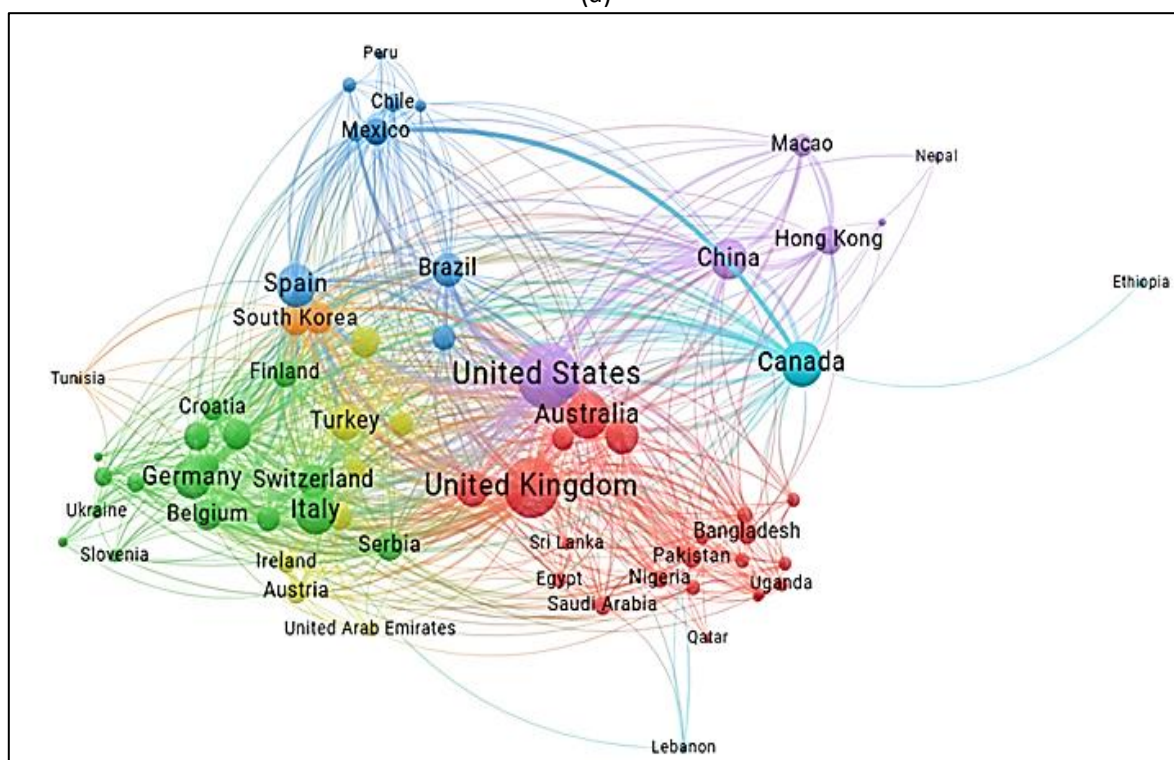
Figure 1(a) illustrates worldwide scientific production indexed by Scopus across different countries. The map uses a colour gradient from yellow to orange to dark blue to represent the number of scientific publications indexed by Scopus from each country. Yellow represents lower scientific output, whereas orange and dark blue represent higher scientific output.

Using the World Health Organization geographical regions, the Region of the Americas and the Western Pacific Region were the most prominent in scientific output, largely due to contributions from the USA, China, and Australia. The European Region also showed substantial scientific activity, particularly in Western Europe. In contrast, the African Region, the Eastern Mediterranean Region, and parts of the South-East Asia Region generally demonstrated lower scientific output. Most African countries had very low scientific output, as indicated by the light-yellow colour on the map. Scientific output in this region was minimal, with countries such as Nigeria ($n = 12$) and South Africa ($n = 15$) contributing relatively few publications, while several others contributed only single-digit numbers or had no publications indexed by Scopus.

Furthermore, Figure 1(b) presents the network visualisation map of co-authorship by countries generated using VOSviewer, based on a minimum threshold of five documents. The network is divided into six clusters, each representing a group of countries that frequently collaborate. The USA-centric cluster (purple cluster), with the USA at its core, represents the most dominant research grouping globally. It includes major contributors from North America (USA and Canada), Asia (China), and Oceania (Australia). These countries demonstrated extensive global collaborations, influencing a broad range of scientific fields. The Western Pacific Region and South-East Asia Region also showed growing influence, particularly through countries such as China, Japan, and India. By contrast, the African Region and parts of the Eastern Mediterranean Region had lower connectivity, highlighting the need for strategies to strengthen their integration into global research networks.



(a)



(b)

Figure 1. Worldwide production and networking. (a) Worldwide scientific production is indexed by Scopus (Source: Generated by the author(s) using iipmaps.com); (b) Network visualisation map of co-authorship by countries (<https://tinyurl.com/co-authorship-by-country>).

Mapping affiliations

A total of 3799 institutions contributed to the publications analysed. Table 2 shows the top 20 institutions with the highest publication output, led by the University of Melbourne (n = 62), followed by the University of Toronto (n = 52), the University of California (n = 42), Harvard University (n = 34), and the University of Oxford (n = 33).

The University of Melbourne led in both publication output and impact, with an h-index of 21 and a g-index of 44. The University of Toronto also demonstrated a strong influence, with a similar g-index of 44. Harvard University, despite having fewer publications, stood out with the highest citations per publication (C/P = 102.21), reflecting exceptional research impact. The University of California and the University of Oxford also made substantial contributions, balancing high publication output with considerable influence in the field.

The Quacquarelli Symonds (QS) World University Rankings 2024 provide a comprehensive and multidimensional assessment of universities worldwide. Institutions with both high QS rankings and strong publication output, such as Harvard University, the University of Oxford, and the University of Melbourne, are clearly established as global academic leaders. Jahangirnagar University (ranked 1201–1400) and the Centers for Disease Control and Prevention, United States, although either lower-ranked or not ranked within the QS system, also demonstrated considerable research output. Notably, the Centers for Disease Control and Prevention showed an exceptionally high C/P value of 189.60.

Table 2. Top 20 institutions with the most publications

Institution Name	Country	TP	NCP	TC	C/P	C/CP	h	g	QS Ranking 2024
University of Melbourne	Australia	62	59	1952	31.48	33.08	21	44	14
University of Toronto	Canada	52	49	2016	38.77	41.14	16	44	21
University of California	United States	42	35	1404	33.43	40.11	14	37	10
Harvard University	United States	34	33	3475	102.21	105.30	17	34	4
University of Oxford	United Kingdom	33	31	1776	53.82	57.29	16	33	3
King's College London	United Kingdom	28	28	1088	38.86	38.86	15	28	40
Yale University	United States	27	25	892	33.04	35.68	11	27	16
University of Michigan – Ann Arbor	United States	27	25	1060	39.26	42.40	11	27	33
University of British Columbia	Canada	26	25	1054	40.54	42.16	13	26	34
Monash University	Australia	24	21	2682	111.75	127.71	11	24	42
University of Sydney	Australia	24	23	525	21.88	22.83	10	22	19
Johns Hopkins University	United States	24	23	1723	71.79	74.91	10	24	28
Jahangirnagar University	Bangladesh	24	24	1384	57.67	57.67	14	24	1201 – 1400
Columbia University	United States	24	22	1070	44.58	48.64	11	24	23
University of Hong Kong	Hong Kong	22	22	496	22.55	22.55	10	22	26

University of Manchester	United Kingdom	22	22	1191	54.14	54.14	12	22	32
Sapienza University of Rome	Italy	21	17	538	25.62	31.65	8	21	134
University of Macau	Macao	20	19	345	17.25	18.16	11	18	254
Centers for Disease Control and Prevention, United States	United States	20	20	3792	189.60	189.60	14	20	Not ranked
University College London	United Kingdom	20	19	1037	51.85	54.58	12	20	9

Notes: TP=total number of publications; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication; h=h-index; g=g-index; and QS Ranking 2024= Quacquarelli Symonds Ranking 2024.

Source: Generated by the author(s).

Journals distribution

A total of 870 journals published articles on this topic, of which 79 published at least five papers. Table 3 shows the top 20 most productive journals. The International Journal of Environmental Research and Public Health led with 100 publications, followed by Frontiers in Psychiatry with 90 and the Journal of Affective Disorders with 67. Overall, the top 20 journals demonstrated a combination of high productivity and strong research influence in their respective fields.

The International Journal of Environmental Research and Public Health led in publication volume but had a moderate influence, with a Q2 ranking. In contrast, Frontiers in Psychiatry, the Journal of Affective Disorders, and Psychiatry Research combined substantial productivity with high impact, all holding Q1 status and strong SCImago Journal Rank (SJR) values, reflecting their prestige in psychiatry and affective disorders. PLoS ONE was also highly productive and influential, with a Q1 ranking, although its SJR was slightly lower than that of several other leading journals, likely reflecting its broader interdisciplinary scope.

JAMA Network Open had the highest SJR value (3.48), indicating the greatest prestige and citation quality among the listed journals. It was also classified as a Q1 journal, reflecting its top-tier standing. Asian Journal of Psychiatry showed a notably high average citation per cited publication (C/CP = 45.15), suggesting that its cited articles tended to receive a large number of citations. Most of the journals listed were in Q1, indicating that they are widely recognised for their quality and influence in their respective disciplines.

Table 3. The top 20 journals with the most publications

Source Title	TP	NCA	NCP	TC	C/P	C/CP	SJR 2023	Q
International Journal of Environmental Research and Public Health	100	625	90	1171	11.71	13.01	0.81	Q2
Frontiers in Psychiatry	90	720	84	1388	15.42	16.52	1.16	Q1
Journal of Affective Disorders	67	642	67	1721	25.69	25.69	2.08	Q1
Psychiatry Research	50	492	49	1779	35.58	36.31	2.19	Q1

PLoS ONE	48	341	40	651	13.56	16.28	0.84	Q1
BMJ Open	37	313	33	617	16.68	18.70	0.97	Q1
Frontiers in Public Health	33	227	30	252	7.64	8.40	0.93	Q1
BMC Psychiatry	30	209	28	326	10.87	11.64	1.3	Q1
Journal of Psychiatric Research	28	360	26	676	24.14	26.00	1.55	Q1
Frontiers in Psychology	25	149	21	641	25.64	30.52	0.8	Q2
JAMA Network Open	22	161	22	1126	51.18	51.18	3.48	Q1
BJPsych Open	19	153	19	138	7.26	7.26	1.46	Q1
Journal of Adolescent Health	18	93	15	290	16.11	19.33	2.27	Q1
Primary Care Companion for CNS Disorders	16	45	11	47	2.94	4.27	0.31	Q3
Asian Journal of Psychiatry	16	108	13	587	36.69	45.15	1.33	Q1
Suicide and Life-Threatening Behavior	15	82	13	371	24.73	28.54	0.71	Q2
Healthcare (Switzerland)	14	61	14	178	12.71	12.71	0.61	Q2
Scientific Reports	14	86	12	173	12.36	14.42	0.9	Q1
Journal of Affective Disorders Reports	14	80	12	206	14.71	17.17	0.85	Q2
Crisis	14	76	14	77	5.50	5.50	0.5	Q3

Notes: TP=total number of publications; NCA=number of contributing authors; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication; SJR 2023= SCImago Journal Rank 2023; Q=quartiles.

Source: Generated by the author(s)

Mapping keywords, clusters, and trend topics

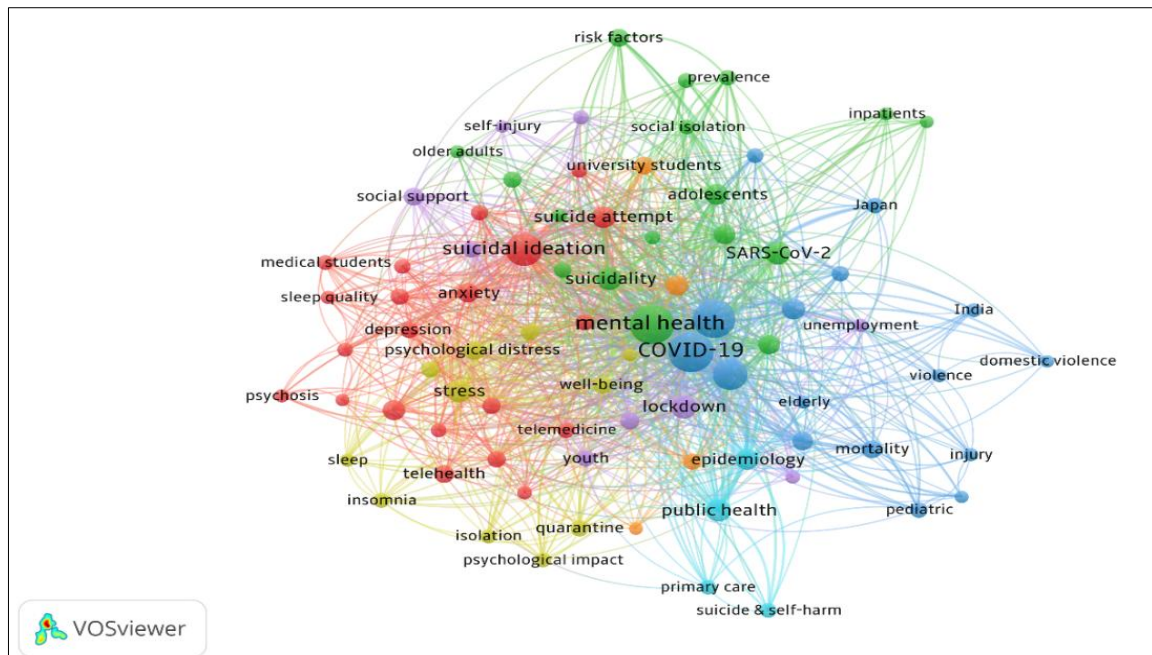
Analysis of the keywords used in the publications was important for identifying research trends and areas of concentration within the field (22,23). A total of 3126 author keywords were analysed. The keyword “COVID-19” had the highest frequency of occurrence (n = 1,208), followed by “mental health” (n = 486), “suicide” (n = 422), “depression” (n = 362), and “suicidal ideation” (n = 234).

Figure 2(a) shows the network visualisation map of keyword co-occurrence based on a minimum threshold of ten occurrences. The map contains seven clusters, each representing a group of closely related keywords. Keywords such as “mental health,” “COVID-19,” “suicidal ideation,” and “suicide attempt” are centrally located and represented by large nodes, indicating that they were highly relevant and frequently co-occurred in the literature.

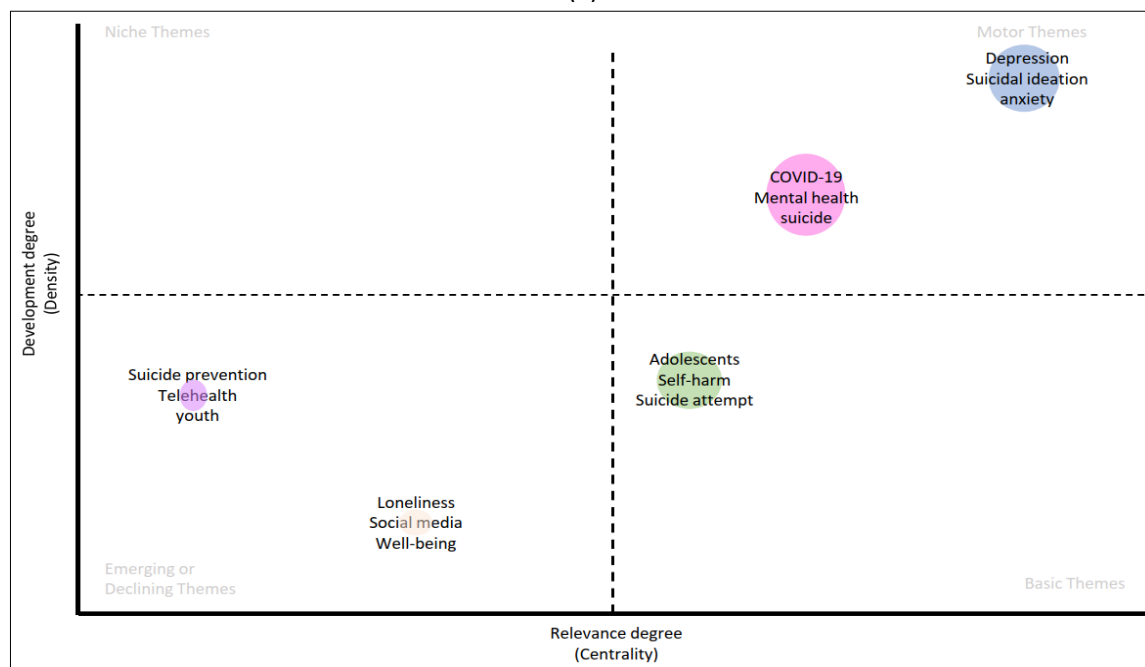
The red cluster focuses on anxiety, depression, stress, psychological distress, and their connection to suicidal ideation and suicide attempts. This cluster indicates a strong link between common mental health problems and suicidal thoughts or behaviours. The blue cluster includes public health, epidemiology, primary care, and related terms, suggesting a focus on broader public health implications and the role of healthcare systems in addressing mental health and suicide. The green cluster contains keywords such as prevalence, social isolation, risk factors, and self-injury, highlighting research on risk factors and the prevalence of mental health problems during the pandemic. The

purple cluster comprises terms such as social support, older adults, and self-injury, emphasising the importance of social factors and specific demographic groups in mental health and suicide research. The orange cluster highlights the relationship between the pandemic, including COVID-19 and lockdowns, and its direct impact on mental health, suicidality, and public health concerns. The light blue cluster centres on the impact of socioeconomic conditions, such as unemployment and violence, on mental health and suicide. The pink cluster focuses on psychological and behavioural health aspects, particularly sleep disturbances, stress, and psychological distress. It also reflects research on the mental health challenges faced by medical students and the link between sleep quality and severe mental health problems, including psychosis.

In addition, thematic map analysis was conducted to visualise the development and relevance of research themes in the field. As shown in Figure 2(b), the keywords “depression,” “suicidal ideation,” and “anxiety” were positioned as highly developed and central themes. In contrast, keywords such as “loneliness,” “well-being,” and “social media” appeared as emerging or declining themes, while “adolescents,” “self-harm,” and “suicide attempt” were identified as basic themes that remain relevant but may require further development.



(a)



(b)

Figure 2. Author keyword mapping: (a) co-occurrence network (<https://tinyurl.com/co-occurrence-of-keywords>) (b) thematic map analysis

Source: Generated by the author(s) using VOSviewer and Biblioshiny.

DISCUSSION

Trends in suicide research from 2020 to 2023

This study provides a comprehensive bibliometric analysis of publications related to suicide during the COVID-19 pandemic from 2020 to 2023. The COVID-19 pandemic marked a new chapter in the evolution of mental health research, leading to a surge in scientific studies focused on understanding its mental health impacts. From 2020 to 2023, there was a remarkable increase in the number of articles related to suicide in the context of COVID-19. This increase highlights the pressing need to understand the links between public health emergencies and mental well-being. The number of articles published annually increased from around 210 in 2020 to more than 700 by 2023. This rise reflects the growing recognition within the scientific community of the pandemic's significant impact on mental well-being, particularly in relation to suicide, which remains an important public health concern.

The key themes emerging from this analysis centred on the mental health impact of COVID-19, including anxiety, depression, and suicidal ideation. These themes are reflected in the most frequently occurring keywords, such as "mental health," "suicide," "depression," and "anxiety," indicating that they remain central to the field. In addition, the bibliometric mapping highlights interconnected areas of interest, including the psychological effects of lockdowns, the mental well-being of vulnerable populations, and the role of social support networks.

Compared with earlier bibliometric work, the present study provides a broader and more updated overview of the literature. Grover et al. examined publications on COVID-19 and suicidal behaviour only up to 17 May 2021 (24), whereas the present study covers the period from 2020 to 2023. This longer timeframe offers a more comprehensive picture of the evolving research landscape beyond the initial phase of the pandemic.

Research gaps: Global disparities in research output

The COVID-19 pandemic provided a unique lens through which to examine suicide-related research across geographical regions. This bibliometric analysis highlights substantial disparities in research output between high-income and low- and middle-income settings. Countries in the Region of the Americas and the European Region, particularly the USA, the United Kingdom, and Canada, contributed the greatest number of publications and demonstrated strong collaboration networks, indicating their dominant role in shaping the global evidence base on suicide during COVID-19.

The concentration of research output in these regions may reflect higher research funding (25), stronger healthcare systems (26), and more established academic infrastructures. Institutions such as the University of Melbourne, the University of Toronto, and Harvard University served as major nodes within international collaboration networks. As a result, the current evidence base may primarily reflect the priorities, contexts, and capacities of high-income countries.

In addition, the absence of publications from several countries with high suicide rates, such as Lesotho, Guyana, and Eswatini, further illustrates the uneven global distribution of research activity. In 2019, Lesotho had the highest suicide rate at 72.4 per 100 000 population, followed by Guyana and Eswatini (40.3 and 29.4 per 100 000, respectively) (27). This imbalance highlights the need for stronger research capacity and broader international collaboration in under-represented settings to strengthen the global evidence base on suicide during public health emergencies. From a policy perspective,

improving research participation from underrepresented regions may support the development of more context-sensitive suicide prevention evidence and better inform preparedness for future public health crises.

Research gaps: Long-term impacts, protective factors, and resilience-building

Longitudinal studies are essential for understanding how mental health outcomes change over time and for identifying factors associated with resilience (28). This study found that longitudinal research examining the long-term impacts of the pandemic on mental health and suicide was comparatively limited during the study period. In addition, the available longitudinal literature appeared to be concentrated largely in high-income countries, leaving an important gap in understanding how the pandemic affected suicide-related outcomes across diverse cultural and socioeconomic settings, particularly in low- and middle-income countries.

During the COVID-19 pandemic, many studies used cross-sectional designs to examine mental health and suicide-related outcomes. While these studies provided valuable evidence on the immediate mental health effects of the pandemic, they were less able to capture how these outcomes evolved. Given the prolonged nature of the pandemic, with recurrent waves of infection, prolonged social restrictions, and ongoing economic uncertainty, longer-term follow-up studies remain important for understanding changes in depression, anxiety, and suicidal ideation.

This study also suggests that research has focused predominantly on risk factors, whereas themes related to protective factors received comparatively less attention. Protective factors, such as social support, family support, community engagement, and personal coping strategies, may be important areas for further empirical investigation in suicide-related research during public health crises (29).

Social support networks emerged as one of the more visible protective-factor themes in the literature; however, other protective themes appeared less prominent in the keyword mapping. This pattern suggests that future studies may benefit from more explicit examination of supportive, coping, and resilience-related dimensions in suicide-related research.

Similarly, resilience-related themes appeared less prominently in the literature. Rather than indicating intervention effectiveness, these findings point to a relative under-representation of resilience-focused research topics, such as coping strategies, mindfulness-related approaches, and community support, within the current bibliometric landscape. Addressing these gaps may help strengthen the evidence base for future suicide prevention research during public health emergencies (30,31).

Strengths and limitations

One of the primary strengths of this study is the use of the Scopus database, which is known for its extensive coverage of high-quality peer-reviewed journals across various disciplines (32) and offers robust citation analysis features compared with PubMed and Web of Science (33). By leveraging this database, the study was able to include a wide range of relevant literature, ensuring that the analysis was both comprehensive and representative of the current state of research on suicide during the COVID-19 pandemic. The use of Scopus also facilitated citation analysis, which was important for identifying influential studies and tracking research trends.

A significant strength of the study lies in its focus on identifying gaps in the current research landscape. By mapping global research trends, the study was able to identify underrepresented geographical regions and themes, including the limited prominence of longitudinal research and the relative lack of emphasis on protective factors and resilience-related topics. This focus on research gaps may help inform future studies and support a more inclusive and comprehensive research agenda.

This study has several limitations. First, the search was conducted exclusively in the Scopus database. Although Scopus offers broad multidisciplinary coverage and robust citation analysis features, relevant studies indexed in other databases may not have been captured. Second, only English-language journal publications were included to maintain consistency in screening and bibliometric comparison across the dataset. This may have reduced the representation of non-English literature and limited the generalisability of the findings. Third, bibliometric analysis is quantitative in nature and depends on database indexing accuracy, metadata quality, and citation patterns. Therefore, it may not fully capture the qualitative depth, methodological quality, or contextual nuances of individual studies.

CONCLUSION

The COVID-19 pandemic has highlighted the crucial need to better understand and address mental health issues, particularly suicide, as reflected in the significant increase in research output from 2020 to 2023. Most publications originated from high-income countries and reputable academic institutions. However, several important gaps remain. Expanding research efforts in underrepresented regions, conducting more longitudinal studies, and further exploring themes related to protective factors and resilience are important steps toward improving understanding of the pandemic's influence on suicide. Addressing these gaps may help the global research community develop a more comprehensive understanding of mental health crises during global health emergencies and strengthen the evidence base for future research and prevention efforts.

Supplementary Materials: Not applicable.

Data Availability: The data supporting this research are available from the authors upon reasonable request.

Author Contributions: A.A.Z. (Writing original draft; Conceptualization; Methodology; Data curation; Formal analysis), S.M.G. (Methodology; Data curation; Visualisation), K.H.A. (Data curation; Formal analysis), N.H.M.I. (Writing – review & editing), A.A. (Conceptualisation; Supervision), S.S. (Supervision, Writing – review & editing; Validation), B.S.G. (Supervision, Writing – review & editing; Validation), M.N.M.N. (Data curation, Formal analysis). All authors discussed and approved the final version.

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