

Web of Science-based Visualization of Research Hotspots on Family Resilience among Long-term Care Patients

Bei Zhu¹, Mohamed Saifulaman Bin Mohamed Said^{2*}, Beng Geok Tan³

¹PhD Candidate, Faculty of Nursing, Lincoln University College (LUC), Kuala Lumpur, Malaysia, 47301.

ORCID iD: <https://orcid.org/0009-0004-7936-2596>

Email: zhubei@lincoln.edu.my

²Professor, Faculty of Nursing, Lincoln University College (LUC), Kuala Lumpur, Malaysia, 47301.

ORCID iD: <https://orcid.org/0009-0006-6006-5844>

Email: drsaifulaman@lincoln.edu.my

³Dr., Faculty of Nursing, Open University Malaysia, Kuala Lumpur, Malaysia, 47301.

ORCID iD: <https://orcid.org/0009-0009-1605-5069>

Email: benggeok63@oum.edu.my

Abstract

Background: The prevalence of chronic diseases that necessitate long-term care has emerged as a significant global public health concern. The long-term care of patients frequently relies on the support of family members. Providing long-term care to patients may cause significant stress and financial strain on family members, which in turn affects family functioning and health. The capacity of families to adapt positively can facilitate recovery and enhance the quality of life for all members of the family. The capacity for resilience within a family unit serves to facilitate positive adaptation and the sustenance of familial stability. It is essential to visualize and analyze the current state and hot frontiers of research on family resilience in patients requiring long-term care. **Materials and Methods:** Studies related to resilience in families for patients who require long-term care were searched based on the Web of Science (WOS) platform. The search was conducted from January 2005 to June 2024, and the resulting data were downloaded to CiteSpace, a software tool used to generate knowledge visualization maps. **Results:** In total, 1,191 articles pertaining to the topic of family resilience among individuals requiring long-term care were retrieved. The largest number of articles published on this topic was in America, with China in second place. The most frequently cited literature is the article “Family Resilience and Connection Promote Flourishing Among US Children, Even Amid Adversity,” published in 2019. The most common keywords are children, parent, adolescent, caregiver, stress, social support, quality of life, and care. Currently, the main research trends include 2 aspects: (1) the application of models on family resilience; and (2) the various factors that contribute to the resilience of families. **Conclusion:** Globally, research on family resilience among long-term care patients needs to be further explored. There are more cross-sectional studies and fewer large-scale longitudinal studies, which need to be further strengthened in order to deepen our understanding of the factors influencing family resilience and how family resilience changes. This will provide a scientific foundation for the creation of evidence-based strategies to enhance the resilience of families of long-term care patients.

Keywords: Long-term Care, Family Resilience, Citespace.

INTRODUCTION

The term ‘long-term care’ was first proposed by the World Health Organization (WHO) to describe the provision of care by informal caregivers (mainly family members, friends, neighbors, etc.) as well as formal care providers (health system, social, institutional or other professionals) and associated volunteers. The objective is to guarantee the continued fulfillment of the personal aspirations of persons who are unable to take care of themselves fully and to improve their standard of living while enabling them to maintain the greatest possible degree of autonomy,

social interaction, and personal respect.^[1] The need for long-term care is becoming increasingly important as chronic diseases, childhood congenital disorders and mental illnesses continue to increase. As data released by the World Health Organisation in 2018 reveals, the prevalence of chronic conditions requiring long-term care has become a serious global public health challenge.

Address for Correspondence: Faculty of Nursing, Lincoln University College (LUC), Kuala Lumpur, Malaysia, 47301
Email: drsaifulaman@lincoln.edu.my

Submitted: 26th August, 2024

Received: 21st September, 2024

Accepted: 10th November, 2024

Published: 06th December, 2024

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

How to cite this article: Zhu B, Mohamed Said, M.S, Tan B G. Web of Science-based Visualization of Research Hotspots on Family Resilience among Long-term Care Patients. *J Nat Sc Biol Med* 2024;15:594-601

Access this article online

Quick Response Code:



Website:

www.jnsbm.org

DOI:

https://doi.org/10.4103/jnsbm.JNSBM_15_3_20

Furthermore, the demographic shift towards an aging population has intensified the urgency for effective long-term care solutions.

In developed countries such as the United States, the long-term care of the sick is often the responsibility of family members.^[2-4] This can result in significant burdens for those who assume this role, as it entails a range of responsibilities and pressures, including those related to the well-being of the family as a whole.^[5] The long-term care of the sick can have negative effects on the physical, emotional, and social well-being of those who provide it and may also result in a significant financial strain on the family. This can, in turn, have an impact on the overall functioning and quality of life of the family unit.^[6]

A Study^[7] stated that families that demonstrate good resilience will facilitate the recovery of the patient and enhance the overall quality of life of the family. Family resilience serves as a strength that can help families make effective adjustments and thus maintain their stability.^[8] Therefore, it is necessary to use CiteSpace to visually analyze the current status, hotspots, and frontiers of research in the area of family resilience for patients requiring long-term care.

CiteSpace is an information visualization software based on the theory of citation analysis, developed by Dr Chao-Mei Chen, a professor in the field of computing and intelligence at Drexel University in the United States, and relies on the Java platform. Using this advanced information visualization technology, it is possible to effectively identify and present emerging trends and their developments in the scientific literature.^[9] This study used CiteSpace software to analyze the literature related to family resilience for individuals requiring long-term care. To identify the current state of research and research directions in this area.

MATERIALS AND METHODS

Search Strategy

In this study, the Web of Science (WOS) core database was selected as the source for the search, as it contains the most influential research literature in the natural sciences engineering and technology. This database forms the basis for data analysis by CiteSpace 6.3.R1 software. An advanced search was selected and Boolean logical operators were applied to construct the search expression: (“family resilience” OR “family hardiness” OR “family adapt*”) AND(“long-term care” OR “family care” OR “caregiving” OR “Caregivers” OR “older” OR “the elder” OR “chronic disease” OR “mental illness” OR “mental disorders”), searching for articles published from 2005 to June 2024. To ensure the quality of the visualization results, only literature classified as “article” or “review” was included in the analysis, and only literature written in English was considered. A total of 1,191 articles were retrieved.

Methods

The literature was analyzed using CiteSpace 6.3.R1 software. The timeframe was set from January 2005 to June 2024, the year of each section was set to 1, the

default top N was set to 50, the choice of the scout was set to the Simplified Network Atlas, and the rest of the settings were set as default. The country, institution, keywords, and reference node options to be analyzed were then selected according to the content to be analyzed.

In CiteSpace, nodes with centrality greater than 0.1 are called key nodes, indicating that they have a more significant and far-reaching impact on the development and evolution of the whole research field.^[10] In CiteSpace, the modularity value (Q value) and the average profile value (S value) are two metrics, which can be used as the basis for judging the effectiveness of the mapping. In general, $Q > 0.3$ indicates that the described association structure is significant, S value > 0.5 usually indicates that the clustering is rational, and S value > 0.7 indicates that the cluster analysis is effective and the result is reliable.^[11]

RESULTS

Trends in the Number of Publications per Year

A sum of 1,191 English-language publications on the topic of family resilience among long-term care patients were identified between January 2005 and June 2024. The analysis clearly shows that the number of publications has shown a significant growth pattern over the past two decades. This trend is illustrated in Figure 1. In the initial period between 2005 and 2012, the volume of publications exhibited a gradual increase. From 2013 to 2020, there were some fluctuations in the total number of publications, but the trend remained upward overall. After 2021, there was a notable acceleration in the growth rate of publications, reaching a peak in 2023. This suggests that research in the field of family resilience for long-term care patients has gained increasing attention from scholars in recent years.

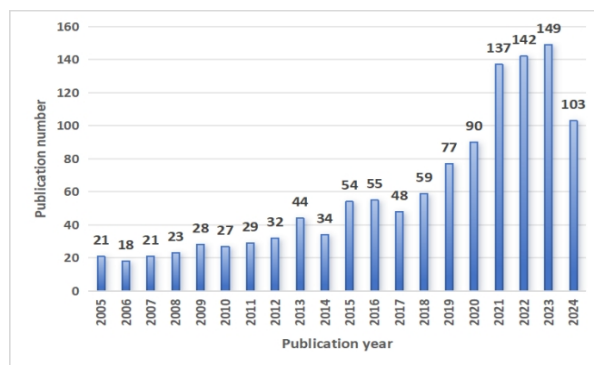


Figure 1: Number of Publications in English Related to Family Resilience among Long-term Care Patients, 2005-2024.

Number of Publications by Countries and Institutions

Regarding the number of articles published on the topic of family resilience in the context of long-term care patients, the top ten countries and regions are as follows (Table 1):1. America, 2.China, 3. Canada, 4. Australia...The countries of the United States, Canada, the Netherlands, the United Kingdom, and Australia have demonstrated a high degree of centrality in the field of family resilience for long-term

care patients, with values exceeding 0.1. This statistic demonstrates the importance of these countries in the field of research and their profound impact on the development of the field. The research institutes and scholars in these countries have made significant contributions to the field of family resilience in the context of long-term care. Their work has provided valuable insights and lessons for related research and practice globally. Despite China's notable research strength and academic enthusiasm in this field, with a considerable number of relevant papers published, its centrality, unfortunately, fails to reach the level of 0.1. This may be attributable to factors such as the delayed commencement of research in China and the necessity for further enhancements in terms of both depth and breadth of research. Nevertheless, with China's growing interest in long-term care issues and intensifying research activity, it is anticipated that China's centrality in

this field will gradually increase. Analyzing the research institutions, it was found that the University of California system, the University of Ohio system, the University of North Carolina, Harvard University, and the University of Toronto are in the top five in the number of articles published (Table 2). It is worth noting that, despite the considerable success of these research institutions in terms of the number of papers published, none of them reached a mediator centrality level of 0.1. This indicates that the current research capacity in the field of family resilience for long-term care patients is relatively dispersed and has not yet formed a close research network or cooperation mechanism. Consequently, future research in this field should prioritize cross-institutional and cross-border collaboration and communication to facilitate collective advancement and progress in the field.

Table 1: Countries/Regions on Family Resilience among Long-term care Patients in WoS(Top 10).

Rank	Country/region	N	Rank	Country/region	Centrality
1	USA	426	1	USA	0.41
2	CHINA	157	2	CANADA	0.19
3	CANADA	60	3	NETHERLANDS	0.15
4	AUSTRALIA	51	4	ENGLAND	0.13
5	ENGLAND	45	5	AUSTRALIA	0.11
6	SOUTH KOREA	45	6	SPAIN	0.1
7	PORTUGAL	34	7	FRANCE	0.09
8	TAIWAN	34	8	PEOPLES R CHINA	0.08
9	ITALY	31	9	PORTUGAL	0.08
10	SPAIN	27	10	BELGIUM	0.07

Table 2: Institutions on Family Resilience among Long-term Care Patients in WoS(Top 5).

Rank	Institution	N	Rank	Institution	Centrality
1	University of California System	31	1	Harvard University	0.09
2	University System of Ohio	28	2	University of Toronto	0.08
3	University of North Carolina	24	3	University of California System	0.07
4	Harvard University	21	4	Seoul National University (SNU)	0.07
5	University of Toronto	19	5	Stanford University	0.07

Co-cited References Analysis

Table 3 presents a descending ranked list of the five most frequently cited references in the field of family resilience about long-term care patients between 2005 and 2024. Highest ranked co-cited reference was published by the team of Bethell *et al.*^[12]. The study was published in the journal *Health Affairs* and entitled “Family Resilience And Connection Promote Flourishing Among US Children, Even Amid Adversity”. The

article posited that family resilience and connection facilitate the growth of children experiencing adversity, including those with chronic illnesses. Three of the five most frequently cited papers are from the research team led by Li YL. The team pioneered the application of the Family Resilience Assessment Scale (FRAS) in the Chinese context in 2016. Since then, they have delved deeper into how family resilience affects cancer patients and their family caregivers.

Table 3: Co-cited References with the Most Frequency on Family Resilience among Long-term Care Patients in WoS (Top 5).

Rank	Reference	Frequency	Centrality
1	Bethell CD, 2019, HEALTH AFFAIR, V38, P729 doi: 10.1377/hlthaff.2018.05425	21	0.02
2	Li YL, 2019, EUR J CANCER CARE, V28, P1 doi: 10.1111/ecc.12984	20	0.01
3	Chen JJ, 2021, EUR J ONCOL NURS, V52, P1 doi: 10.1016/j.ejon.2021.101932	17	0.01
4	Li YL, 2018, INT J NURS STUD, V88, P79 doi: 10.1016/j.ijnurstu.2018.08.011	13	0.04
5	Li YL, 2016, J CHILD FAM STUD, V25, P2710 doi: 10.1007/s10826-016-0432-7	12	0.02

High-frequency Keyword Analysis

Select the “keyword” node to analyze, and get the keyword co-occurrence knowledge graph that has 506 nodes. Furthermore, it can be observed that the connections between the aforementioned nodes are relatively close. $Q = 0.7136$, $S = 0.8741$. 53 keywords with a frequency of more than 20 are included, and there is a strong correlation between these keywords, which can reveal research hotspots and trends. According to the frequency and centrality of hot keywords,

the keywords with the top 10 frequency rankings and mediator centrality of more than 0.1 are listed in Table 4, and the hot keywords for the main research subjects of the study of long-term care patients’ family resilience include children, parents, adolescents, and caregiver, and the hot keywords for the related factors of family resilience keywords are stress, social support, and quality of life, among which care has good centrality, and the keyword co-occurrence knowledge map is shown in Figure 2.

Table 4: Frequency and Centrality of Keywords of Family Resilience among Long-term Care Patients in WoS (Top 10).

Rank	Frequency	Keywords	Rank	Centrality	Keywords
1	220	Children	1	0.23	Behavior
2	169	Parent	2	0.2	Challenges
3	142	Quality Of Life	3	0.17	Adults
4	137	Family Resilience	4	0.17	Abuse
5	134	Health	5	0.14	Behavior Problems
6	132	Stress	6	0.13	Care
7	107	Adolescents	7	0.12	Associations
8	106	Social Support	8	0.11	Outcome
9	103	Care	9	0.11	Adaptation
10	98	Caregiver	10	0.11	Risk Factors

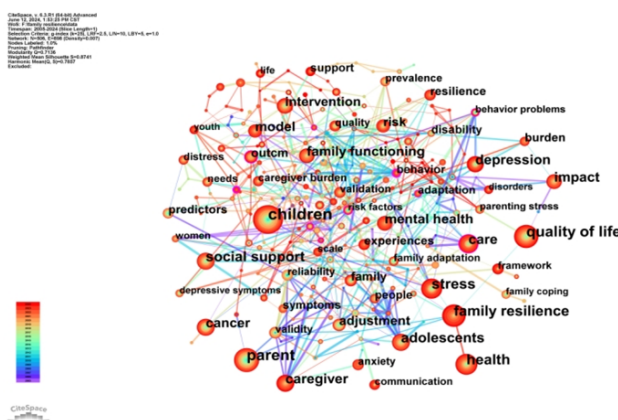


Figure 2: Keywords Co-occurrence Map for Family Resilience among Long-term Care Patients in WoS.

Table 5: Clustering of Keywords for Family Resilience among Long-term Care Patients in WoS.

ClusterID	Size	Silhouette	Coverage	Label
0	44	0.842	family resilience; family adaptation; family function; parallel mediation; physical health family functioning; preterm infant; family resiliency; protective factors; recovery factors	Family Resilience
1	42	0.832	family cohesion; family adaptability; school engagement; academic self-concept; school adjustment family functioning; brain tumor; pediatric cancer; cross-sectional study; postpartum depressive symptoms	Family Cohesion
2	38	0.869	adolescents; mental health; adjustment; developmental disability; adult siblings family resilience; autism spectrum disorder; community support; coping strategies; support groups	Adolescents
3	34	0.82	model; school success; family beliefs; breast cancer social support; breast neoplasms; cancer survivors; communication patterns; posttraumatic stress	Model
4	34	0.943	family functioning; bipolar disorder; intraindividual reaction time variability; high school; suicide risk family strengths; family resilience; adolescent health; family support; mental health	Family Functioning
5	30	0.878	social support; family resilience; young adults; caregiver preparedness; patient-reported symptoms family adaptation; behavioural disorders; structural equation modelling; parental distress; cerebral palsy	Social Support
6	29	0.867	gynecologic cancer; illness communication; mediating effect; illness perception social support; psychological resilience; family communication; major depressive disorder; parenting style	Gynecologic Cancer
7	27	0.896	mental disorders; mental health; preschool children; threat experience; child behaviour family resilience; operationalization challenges; practical implications; behavioral problem; medical education	Mental Disorders
8	27	0.818	advanced cancer; palliative care; coherence; mental health; family functioning depression; hospital anxiety; integrated care; health; psychometric development	Advanced Cancer
9	26	0.917	family relations; health literacy; dental care; health services accessibility; adolescent health family resilience; adolescents; mental health; instruments; connection	Family Relations
10	26	0.847	children; siblings; care ethics; renal transplantation social support; family adaptation; maternal well-being; siblings; care ethics	Children
11	24	0.926	qualitative research; chronic kidney disease; health belief model; renal failure; family support family resilience; conceptual model; education; orphanhood; family functioning	Qualitative Research
12	23	0.867	parenting stress; autism spectrum disorder; family strain; cultural identity social support; family caregiver; terminal cancer; health status; latent class	Parenting Stress
13	21	0.886	traumatic brain injury; spinal cord injury; family adaptation; siblings; psychosocial conditions family functioning; head injury; mental health; preschool children; in-depth interviews	Traumatic Brain Injury

Further cluster analysis based on the keyword co-occurrence map, and the cluster labels subsequently unveiled significant themes within the confines of the research field (Figure 3). The final number of clusters was 13 and the contour value of each cluster was greater than 0.6, indicating reasonable clustering results. These 13 clustering labels

extracted from the keywords were #0 family resilience, #1 family cohesion, #2 adolescents, #3 model, #4 family functioning, #5 social support, #6 gynecologic cancer, #7 mental disorders, #8 advanced cancer, #9 family relations, #10 children, #11 qualitative research, #12 parenting stress, #13 traumatic brain injury (Table 5).

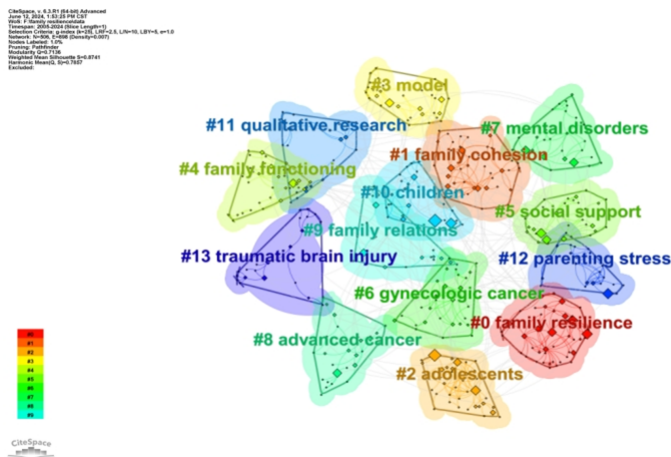


Figure 3: Keywords Cluster Map for Family Resilience among Long-term Care Patients in WoS.

To explore 25 keywords with a significant increase in frequency over a short period of time between 2005-2024, all of which are in the research area of family resilience for long-term care patients(Figure 4). The blue and red lines indicate the time interval and the duration of these high-frequency keywords, respectively. It is possible to examine a stage of evolution that characterizes recent research and predict future developments.^[13] In the preceding period, the primary focus of family resilience research on patients requiring long-term care was on children with chronic or congenital diseases and their

parents. This research examined the predictors of their family resilience. From 2011 to 2020, the research focus shifted to the exploration of the family experience of adversity. The target of the study was expanded to include parents, relatives, and siblings. This allowed for the investigation of the impact of perception, family coping, and other factors. Since 2021, the focus of research on family resilience among long-term care patients has centered on protective factors and the application of the theoretical framework of family resilience.

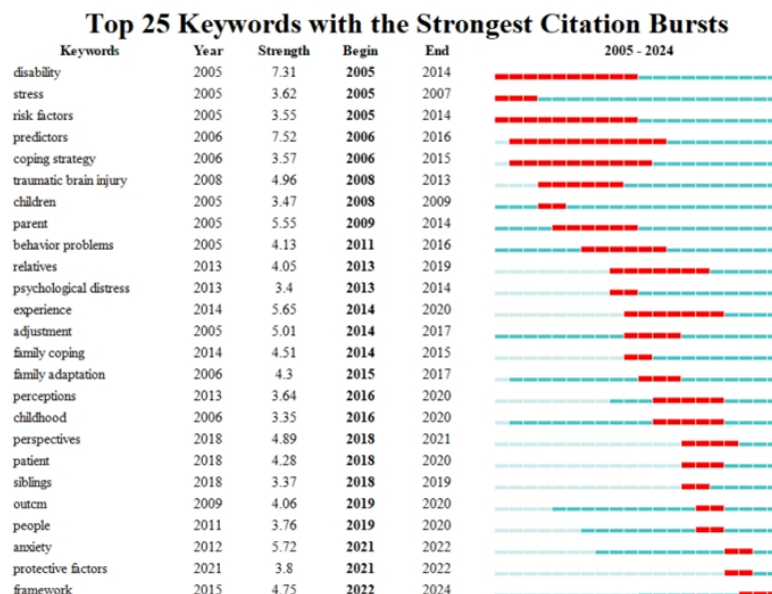


Figure 4: Burst Keyword Map for Family Resilience among Long-term Care Patients in WoS from Years 2004–2024.

DISCUSSION

Current Status of Research on Family Resilience of Long-term Care Patients

The results of this study show a general upward trend in the number of articles published on the topic of family resilience among long-term care patients, from 21 in 2005 to 103 between January and June 2024. This trend suggests that the field is continuously evolving and has garnered the interest of an increasing number of clinicians and researchers. A significant number of countries and regions around the world have conducted research in the field of family resilience among long-term care patients. The countries with the highest volume of literature output are America and China. Furthermore, America has the highest degree of centrality, indicating that its research in the field of family resilience in patients who require long-term care exerts a considerable influence. China, the second most prolific country in terms of publications, is undergoing a rapid development phase. However, its research in this field commenced relatively late, and the centrality of network mediators is currently low. The mediational centrality of all research institutions is less than 0.1, indicating that the research power is dispersed and that the cooperative relationship between different institutions is insufficient. There is a pressing need to enhance the collaboration between institutions.

Research Hotspots and Cutting-edge Analyses of Family Resilience among Long-term Care Patients Application of Family Resilience Models

Since the 1970s, Mr. and Mrs. McCubbin and their colleagues have initiated research into the phenomenon of family stress and the ways in which families cope with adversity. This has led to the development of a series of theoretical models of family resilience. Notable among these are the Double ABCX Model and the Family Adjustment and Adaptation Response (FAAR) Model, which have been widely adopted. In a research study of family members with advanced cancer,^[14] the researchers made use of concepts derived from the Double ABCX Model in order to facilitate reflection on the interviews conducted with 63 caregivers of cancer sufferers undergoing treatment in an outpatient palliative care facility. The interviews with the aforementioned caregivers were subjected to analysis in order to identify any reflective themes. The study summarised four major themes of family stress: additional caring burdens, lack of support, relationship discord, and denial of reality. The findings suggest that it is particularly important to assess the family life chores of carers of adult cancer patients, to guide the clinical assessment and design of support programs for such carers. In an Australian cohort study, a modified dual ABCX framework was employed to investigate potential predictors of family outcomes. The findings indicated that parental and family factors were significant predictors.^[15] In the study by Mengfan Xu's team,^[16] family function and family resilience were used as mediators and their roles in the relationship between

stressors and family adaptation were assessed using the FAAR model. It indicated that stressors result in a reduction in family functioning and resilience and that interventions designed to enhance these factors may help mitigate the impact of stressors on family adjustment in stroke patients. Another model of family resilience that has gained wider acceptance is Walsh's Family Resilience Model. This model combines two distinct perspectives, namely an ecological perspective and a developmental perspective, with a competency-based paradigm. A qualitative study of children with bipolar disorder,^[17] based on the Walsh model of family resilience, identified six major themes and found that children's family resilience could transform the pain of living with their ill parent into a positive developmental experience. In contrast, conflict between their parents, and poor family functioning, may lead to traumatic developmental experiences. In addition, a qualitative study of caregivers of adolescents suffering from sickle cell disease^[18] used the same model of family resilience, identifying three main themes such as belief systems. The study underscored the necessity of evaluating sickle cell disease (SCD) in youth, emphasizing the significance of assessing resilience within the family unit. Furthermore, it proposed that psychosocial interventions based on family strengths may yield beneficial clinical outcomes.

Research on Factors Influencing Family Resilience

Family resilience is affected by a combination of risk and protective factors. Illness and the stress it causes are risk factors for family resilience, specifically the severity of the illness, the burden on the carer, the carer's negative emotions, and other factors. In a study conducted by K. Suzuki and colleagues,^[19] the family resilience of children with developmental disabilities was investigated. The results showed that higher levels of developmental disabilities were associated with lower levels of family resilience. In a systematic review of family resilience and adaptive coping in children with idiopathic osteoarthritis, Saetes *et al.*^[20] also observed that the sicker the child, the lower the level of family resilience perceived by parents. A cross-sectional survey of 173 parents of children with epilepsy showed a negative association between the burden of care and the level of family resilience.^[21] Another cross-sectional study of 137 two-parent families with children with asthma showed that risk factors for family resilience were parental depression and anxious mood.^[22]

The protective factors of family resilience are a diverse system that includes many key elements that can be categorized into personal psychological resilience, post-traumatic growth, and self-efficacy at the individual level, good family finances, family communication, family cohesion at the family level, and social support at the societal level. Together, these factors provide families with solid protection and support in the face of various challenges. A study by Li and colleagues^[23] showed that personal psychological resilience and post-traumatic growth in breast cancer patients mediated the relationship between caregiver burden and the resilience of families.

This suggests that personal psychological resiliency and post-trauma growth are important personal resources to reduce caregiver stress and improve family functioning. A longitudinal study of first-time stroke patients in China, with 1-year follow-up and data analysis, ultimately found that stroke patients' self-efficacy, the social support they received, and the family atmosphere they lived in were positively predictive of family resilience at four different time points of the study.^[24] In examining the relationship between physical health and mental resilience, family functioning, experience of emergency room visits, and mental health in adolescents with asthma, Laura A Nabors' team found that friend support and maintaining good body image were associated with better family resilience.^[25] Cui and colleagues^[26] conducted a cross-sectional survey study in China, in which oncology patients and family caregivers were selected for the study. It was found that caregivers who possessed health insurance demonstrated cohesion within their family unit, perceived a greater level of social support, and exhibited higher levels of psychological resilience exhibited higher levels of family resilience. A comprehensive cross-sectional national survey in South Korea found a positive association between constructive communication and family resilience among those living with cancer and those caring for them.^[27] Hayes and colleagues^[28] conducted a cross-sectional investigation that found that when some community support was provided to caregivers of adolescents with autism, these caregivers demonstrated higher family resilience and better performance in terms of mental health status. This finding underscores the critical role of community support in empowering families of adolescents with autism to cope with challenges, promoting strong bonds among family members, and maintaining caregiver mental health.

Limitation

It should be noted that this study is not without limitations. (1) This study was based exclusively on papers included in the Web of Science Core Collection database; thus, its findings may not be wholly representative of all research in the domain of family resilience in the context of long-term care. (2) Given that CiteSpace software is a bibliometric-specific analysis tool rather than a full-text search engine, it is possible that some key details may have been omitted in the visualization mapping. (3) It should be noted that only literature in the English language was included in this study, which may have had some impact on the results of the analysis.

CONCLUSIONS

This study found through intuitive analyses that research on family resilience for long-term care patients is still in the developmental stage and that relevant research is emerging and growing. America is currently leading the field, and there is room for further strengthening of collaborative relationships between different institutions. The application of family resilience modeling and the study of factors influencing the resilience of families of

long-term care patients are the research hotspots in this field. Although the factors influencing the resilience of families of long-term care patients have been analyzed internationally, they remain mainly at the level of cross-sectional studies with small samples. Meanwhile, given that family resilience changes, as families experience time in the face of adversity, it is recommended that future large-sample longitudinal studies be conducted to explore in depth the trends in family resilience and the factors that influence it at different stages of the illness. Such studies will provide a scientific basis for the development of meaningful strategies aimed at enhancing the family resilience of long-term care patients.

REFERENCES

1. Arias-Casais N, Amuthavalli Thiyagarajan J, Rodrigues Perracini M, et al. What long-term care interventions have been published between 2010 and 2020? Results of a WHO scoping review identifying long-term care interventions for older people around the world. *BMJ Open*. 2022; 12(1): e054492. doi: <https://doi.org/10.1136/bmjopen-2021-054492>.
2. Aung TNN, Aung MN, Moolphate S, Koyanagi Y, Supakankunti S, Yuasa M. Caregiver Burden and Associated Factors for the Respite Care Needs among the Family Caregivers of Community Dwelling Senior Citizens in Chiang Mai, Northern Thailand. *Int J Environ Res Public Health*. 2021; 18(11): 5873. doi: <https://doi.org/10.3390/ijerph18115873>.
3. Harkin DJ, O'Connor CMC, Birch MR, Poulos CJ. Perspectives of Australian family carers of people with dementia on the 'cottage' model of respite: Compared to traditional models of residential respite provided in aged care facilities. *Health Soc Care Community*. 2020; 28(3): 850-61. doi: <https://doi.org/10.1111/hsc.12916>.
4. Utz RL. Caregiver Respite: An Essential Component of Home- and Community-Based Long-Term Care. *J Am Med Dir Assoc*. 2022; 23(2): 320-21. doi: <https://doi.org/10.1016/j.jamda.2021.12.020>.
5. Kim J, Kim H, Park S, Yoo J, Gelegjamts D. Mediating effects of family functioning on the relationship between care burden and family quality of life of caregivers of children with intellectual disabilities in Mongolia. *J Appl Res Intellect Disabil*. 2021; 34(2): 507-15. doi: <https://doi.org/10.1111/jar.12814>.
6. Wang A, Bai X, Lou T, Pang J, Tang S. Mitigating distress and promoting positive aspects of caring in caregivers of children and adolescents with schizophrenia: Mediation effects of resilience, hope, and social support. *Int J Ment Health Nurs*. 2020; 29(1): 80-91. doi: <https://doi.org/10.1111/inm.12651>.
7. Mooney-Doyle K, Dos Santos MR, Szylyt R, Deatrick JA. Parental expectations of support from healthcare providers during pediatric life-threatening illness: A secondary, qualitative analysis. *J Pediatr Nurs*. 2017; 36: 163-72. doi: <https://doi.org/10.1016/j.pedn.2017.05.008>.

8. Bethell CD, Garner AS, Gombojav N, Blackwell C, Heller L, Mendelson T. Social and Relational Health Risks and Common Mental Health Problems Among US Children: The Mitigating Role of Family Resilience and Connection to Promote Positive Socioemotional and School-Related Outcomes. *Child Adolesc Psychiatr Clin N Am*. 2022; 31(1): 45-70. doi: <https://doi.org/10.1016/j.chc.2021.08.001>.
9. Chen C, Dubin R, Kim MC. Emerging trends and new developments in regenerative medicine: a scientometric update (2000 - 2014). *Expert Opin Biol Ther*. 2014; 14(9): 1295-317. doi: <https://doi.org/10.1517/14712598.2014.920813>.
10. Zhou X, Kang C, Hu Y, Wang X. Study on insulin resistance and ischemic cerebrovascular disease: A bibliometric analysis via CiteSpace. *Front Public Health*. 2023; 11: 1021378. doi: <https://doi.org/10.3389/fpubh.2023.1021378>.
11. Yan S, Pang M, Wang J, et al. A comparative study of bibliometric analysis on old adults' cognitive impairment based on Web of Science and CNKI via CiteSpace. *Health Econ Rev*. 2023; 13(1): 56. doi: <https://doi.org/10.1186/s13561-023-00470-7>.
12. Bethell CD, Gombojav N, Whitaker RC. Family Resilience And Connection Promote Flourishing Among US Children, Even Amid Adversity. *Health Aff (Millwood)*. 2019; 38(5): 729-37. doi: <https://doi.org/10.1377/hlthaff.2018.05425>.
13. Zhou Q, Kong HB, He BM, Zhou SY. Bibliometric Analysis of Bronchopulmonary Dysplasia in Extremely Premature Infants in the Web of Science Database Using CiteSpace Software. *Front Pediatr*. 2021; 9: 705033. doi: <https://doi.org/10.3389/fped.2021.705033>.
14. Benson JJ, Washington KT, Landon OJ, Chakurian DE, Demiris G, Parker Oliver D. When Family Life Contributes to Cancer Caregiver Burden in Palliative Care. *J Fam Nurs*. 2023; 29(3): 275-87. doi: <https://doi.org/10.1177/10748407231167545>.
15. Wicks R, Paynter J, Adams D. Exploring the Predictors of Family Outcomes of Early Intervention for Children on the Autism Spectrum: An Australian Cohort Study. *J Early Interv*. 2021; 43(1): 3-23. doi: <https://doi.org/10.1177/1053815119883413>.
16. Xu M, Yan H, Gao Z, Zhou K, Kuang J, Yang L. Effect of stressors on family adaptation in stroke patients: A parallel multivariable mediation model. *Geriatr Nurs*. 2023; 53: 212-17. doi: <https://doi.org/10.1016/j.gerinurse.2023.07.004>.
17. Liu SH, Hsiao FH, Chen SC, Shiau SJ, Hsieh MH. The experiences of family resilience from the view of the adult children of parents with bipolar disorder in Chinese society. *J Adv Nurs*. 2022; 78(1): 176-86. doi: <https://doi.org/10.1111/jan.15008>.
18. Reader SK, Pantaleao A, Keeler CN, et al. Family Resilience From the Perspective of Caregivers of Youth With Sickle Cell Disease. *J Pediatr Hematol Oncol*. 2020; 42(2): 100-06. doi: <https://doi.org/10.1097/mph.0000000000001682>.
19. Suzuki K, Hiratani M, Mizukoshi N, Hayashi T, Inagaki M. Family resilience elements alleviate the relationship between maternal psychological distress and the severity of children's developmental disorders. *Res Dev Disabil*. 2018; 83: 91-98. doi: <https://doi.org/10.1016/j.ridd.2018.08.006>.
20. Saetes S, Hynes L, McGuire BE, Caes L. Family resilience and adaptive coping in children with juvenile idiopathic arthritis: protocol for a systematic review. *Syst Rev*. 2017; 6(1): 221. doi: <https://doi.org/10.1186/s13643-017-0619-z>.
21. Ma Q, Yan Z, Chang L, Zhang Q, Li Y. Family resilience and subjective responses to caregiving for children with epilepsy. *Epilepsy Behav*. 2021; 125: 108417. doi: <https://doi.org/10.1016/j.yebeh.2021.108417>.
22. Svavarsdottir EK, Rayens MK. Hardiness in families of young children with asthma. *J Adv Nurs*. 2005; 50(4): 381-90. doi: <https://doi.org/10.1111/j.1365-2648.2005.03403.x>.
23. Li Y, Qiao Y, Luan X, Li S, Wang K. Family resilience and psychological well-being among Chinese breast cancer survivors and their caregivers. *Eur J Cancer Care (Engl)*. 2019; 28(2): e12984. doi: <https://doi.org/10.1111/ecc.12984>.
24. Zhang W, Zhou W, Ye M, Gao Y, Zhou L. Family resilience of stroke survivors within 6 months after a first-episode stroke: A longitudinal study. *Front Psychiatry*. 2022; 13: 968933. doi: <https://doi.org/10.3389/fpsy.2022.968933>.
25. Nabors LA, Adabla S, Merianos AL. Predictors of family resilience, emotional, behavioral, and developmental concerns and emergency room visits for children with asthma. *Fam Syst Health*. 2022; 40(2): 171-81. doi: <https://doi.org/10.1037/fsh0000665>.
26. Cui P, Shi J, Li S, Getu MA, Wang R, Chen C. Family resilience and its influencing factors among advanced cancer patients and their family caregivers: a multilevel modeling analysis. *BMC Cancer*. 2023; 23(1): 623. doi: <https://doi.org/10.1186/s12885-023-11101-z>.
27. Shin JY, Steger MF, Shin DW, et al. Patient-family communication mediates the relation between family hardiness and caregiver positivity: Exploring the moderating role of caregiver depression and anxiety. *J Psychosoc Oncol*. 2019; 37(5): 557-72. doi: <https://doi.org/10.1080/07347332.2019.1566808>.
28. Hayes KN, Rossetti KG, Zlomke K. Community support, family resilience and mental health among caregivers of youth with autism spectrum disorder. *Child Care Health Dev*. 2023; 49(1): 130-36. doi: <https://doi.org/10.1111/cch.13025>.