

Family resilience of cancer patients: a concept analysis



Review

Ge-Ge Han*

Department of Neurosurgery, The First Affiliated Hospital of Zhengzhou University, Zhengzhou, Henan 450001, China

Received: 22 September 2023; Accepted: 25 January 2024; Published: 20 June 2024

Abstract: **Objective:** The concept of family resilience of cancer patients was discussed through literature review, which provided reference for nursing of cancer patients.

Methods: China National Knowledge Infrastructure (CNKI), Wanfang Database, SinoMed, PubMed, Web of Science, and Embase were systematically searched, and the concept analysis method proposed by Walker and Avant was adopted.

Results: In this study, we defined the concept of family resilience, identified attributes, and analyzed the antecedents and consequences. The proposed operational definition of family resilience was: After a family member is diagnosed with cancer, the whole family can actively explore its own unique internal and external resources and advantages, strengthen self-regulation, jointly cope with the crisis by establishing close family relationships, providing mutual support to family members, and interacting with the outside world.

Conclusions: The definition of family resilience of cancer patients is conducive to the development of measurement tools and the improvement of family outcomes of adult cancer patients by intervening family resilience factors.

Keywords: cancer patients • concept analysis • family resilience • literature review • nursing care

© Shanxi Medical Periodical Press Co., Ltd.

1. Introduction

Global Cancer Statistics (2022) indicates that there are >19.3 million (19,300,000) new cancer cases reported recently leading to approximately 10 million deaths in 2020 based on the reported data worldwide.¹ And in China, there were about 3.92 million new cases of malignant tumors in 2015.² Cancer, as a crisis, is a persistent challenge to patients and their families. Diagnosis and treatment of cancer not only affect the physical and mental health of patients, but also bring many negative effects on the family.³

In order to promote the treatment of cancer and improve the prognosis, clinicians began to shift from treating patients from an individual perspective to a family centered treatment model with the support of the family system theory, emphasizing the overall advantages and flexibility of the family.⁴ Studies have shown that a high level of family resilience can affect individual psychological resilience, help reduce negative emotions, and improve the well-being and quality of life of patients and family members.^{5,6} Due to the complexity of cancer

How to cite this article: Han GG. Family resilience of cancer patients: a concept analysis. *Front Nurs.* 2024;2:153–158.

*Corresponding author.

E-mail: 1158848170@qq.com (G. -G. Han).

Open Access. © 2024 Han, published by Sciendo. This work is licensed under the Creative Commons Attribution 4.0 License.

treatment, families have to adjust their role functions and assume corresponding responsibilities. Family perceptions and responses to cancer are very important for cancer patients.

Family resilience is a positive force that helps the whole family adapt successfully to pressure and adversity.⁷ In other words, family resilience affirms the potential of a family to recover and grow from adversity, and evaluates family functions and resources from the perspective of family advantages.

The academic community has not yet unified the concept of family resilience of cancer patients, and this concept also needs to be expanded and updated. However, there is no accurate and unified definition of family resilience of cancer patients at home and abroad. The mature concept has the characteristics of being specific, clear boundaries, and can be directly measured and applied by describing the causes and consequences.

Therefore, this study aims to further summarize and analyze the connotation of this concept. Concept analysis is an effective method to clarify the widely used but ambiguous concepts involving multiple disciplines.⁸ In the process of concept analysis, the general conclusion is constantly summarized and the concept is integrated with strict and careful formulas.

2. Methods

Walker and Avant's⁹ method was used for this review, which has been widely used in nursing research. In this study, Walker and Avant's theory was applied to analyze and discuss family resilience in cancer patients, and the concept was clarified by summarizing the attributes of family resilience. The method is divided into 8 steps: (1) Concept selection, family resilience of adult cancer patients; (2) Determine the purpose of analysis, and give the operational definition of family resilience in cancer patients; (3) Determine the application of the concept in the literature; (4) Define the attributes; (5) Build examples; (6) Construct critical, relevant and opposite cases; (7) Determine the cause and effect; (8) Provide empirical evaluation indicators.

2.1. Data sources

The literature was systematically retrieved from PubMed, Embase, Web of Science, SinoMed, China National Knowledge Infrastructure (CNKI), and WanFang databases with no limitation on publication date with keywords of "family resilience" combined with "cancer," "tumor," "neoplasm," or "oncology."

The inclusion criteria were: (1) Studies that are relevant to the topic and fit with the content of the analysis; (2) English and Chinese articles. Initially, 585 papers

were identified. This number was reduced to 398 articles when duplicates were removed.

After analyzing the abstract, 200 articles were retained. After 173 papers were fully reviewed against inclusion criteria, a further 155 papers were excluded. Therefore, a total of 18 papers met the inclusion criteria and were included in the concept analysis.

3. Results

3.1. Selecting a concept

According to Walker and Avant⁹ before a concept is selected its significance should be scrutinized across a variety of settings. Family resilience of cancer patients is the selected concept for this analysis.

3.2. Literature definitions

Family resilience is developed from the application of individual resilience to family systems. In 1988, McCubbin et al.¹⁰ first proposed the concept, which was defined as: family characteristics, attributes, and resources in the face of life changes, adversity, or pressure. In recent years, researchers no longer simply discuss the mechanism of family resilience, but pay more attention to the practical significance of family resilience. Faccio et al.¹¹ showed that family resilience can help family members activate the recovery process before cancer diagnosis and treatment, and promote family function to reach a new balance. From an oncology perspective, the quality of family relationships can influence family members' adaptation to life-threatening diseases, and influence the outcome of regulatory adaptation and survival outcomes.¹² Walsh¹³ believes that family resilience means the family, as a functional unit, is able to cope more effectively with the crisis from within or outside the family, recover from the crisis or pressure, become stronger, and obtain more psychosocial resources. Yu et al.¹⁴ showed that positive family resilience can reduce the burden of caregivers and promote families to establish meaningful interpersonal relationships and enhance personal strength.

3.3. Defining attributes

Defining attributes refers to the characteristics, elements, or components of a certain concept, which is conducive to in-depth understanding and grasp of the concept and to distinguish it from other similar concepts.¹⁵ According to research, there are 4 defining attributes of family resilience in cancer patients: (1) Personality traits; (2) Family relations; (3) Family support; (4) Interaction with the outside world.

3.3.1. *Personality traits*

Personality traits can predict behavioral tendencies of individuals. Individuals with positive personality traits have stronger body-centered adaptive abilities, lower symptom perceptions, and more stable emotions. Resilient families are characterized by perseverance, hope, optimism, openness, a sense of responsibility, and initiative.^{16–18}

3.3.2. *Family relations*

Family relationship mainly refers to the emotional connection between family members, such as parent–child relationship.¹⁹ In a family with high resilience, the relationship between its members is close and harmonious.

3.3.3. *Family support*

Effective family support can make individuals feel valued and cared for. Family support includes economic assistance, emotional support, and credit support.¹⁷ Family members provide emotional support for patients by accompanying them and distracting their attention and relieve the negative emotions of patients and family members.

3.3.4. *Interaction with the outside world*

Members of the sick family interaction with the outside world refers to the interaction between individuals and the environment. It emphasizes the activeness of individuals and can show the elasticity of individual bodies.²⁰

4. *Constructed cases*

The identification of the model aims to improve the understanding of defining attributes of family resilience and to provide support for antecedents and consequences.

Ms. Wang, 55 years old, has a harmonious relationship with her husband, a son has established a small family. She was diagnosed with meningioma and her doctor suggested surgery. But Wang refused treatment, thinking it was cancer and could not be cured by surgery. Her lover and son encouraged her to have surgery. The doctors and nurses provided the patients' families with detailed information about the disease and prognosis. She got along well with the patients around and actively learned the methods of postoperative self-management. Now, the patient has recovered well after the operation. She is very grateful for the care and support of her husband and son since her illness, and also cooperate with the follow-up review and treatment. This case is an example containing all the defining attributes of family

resilience. Ms. Wang can actively accept the fact, get along well with family members, and get emotional and information support from family members and the outside world.

5. *Antecedents*

Walker and Avant⁹ describe antecedents as events or incidents that precede the concept's occurrence. According to a literature review, family resilience is shown when a family experiences adversity or difficulties. Family itself has resource advantages and development potential, but also needs the strong will of family members to overcome difficulties.

The antecedents of family flexibility of adult cancer patients mainly include: (1) Events related to cancer: including diagnosis of cancer, treatment, method, and course of cancer. When a family member is diagnosed with cancer and knows about it, the balance of family functioning is disrupted. (2) Demographic statistics: including educational background, family economic status, residence, and payment of medical expenses.^{15,21,22} (3) Individual characteristics of patients and family members: including the ability to grow after injury, psychological elasticity, sense pressure, trust, and utilize social economic resources.²² (4) Family factors: including family communication and problem-solving, family resilience, and social support. Families have different structures and resources, and are united in their own life paths and ways to assist, actively communicate, and hold an optimistic attitude toward the disease.

6. *Consequences*

Walker and Avant⁹ refer to consequences as events or incidents that follow the family resilience. The consequences are primarily positive changes in the face of cancer by cancer patients and their families, which are mainly to improve the mental and health behavior of patients and family members. There are several consequences.

6.1. *Integrate resources*

Family resilience can mobilize existing resources and activate new resources to support patients. In the process of adjusting to cancer, the family will receive financial and emotional support from the family, medical team, and the community. Therefore, family resilience can promote family adaptation and reduce the burden of caregivers. Family resilience can also improve individual psychological resilience and promote post-traumatic growth.²³

6.2. Cooperation and coordination

Family resilience enables family members to understand and help each other, explore strategies to solve problems, and strengthen emotional communication.²⁴

Flexible families can strengthen family bonds and become more cohesive. In addition, the ability to interact and communicate among family members is also improved, promoting family closeness.

6.3. Positive development

Family resilience can help family members have firm beliefs, clear family meaning and goals, have a positive outlook on life, meet new challenges with an optimistic attitude, and move forward as a whole.

7. Discussion

With the increase of cancer cases year by year, the psychological burden of cancer patients and family members becomes increasingly prominent. Timely detection of their psychological problems and intervention can effectively improve the mood of patients and family members, and ultimately promote their life quality. This is a proposed operational definition of family resilience generated from the current concept analysis: after a family member is diagnosed with cancer, the whole family can actively explore its own unique internal and external resources and advantages, strengthen self-regulation, jointly cope with the crisis by establishing close family relationships, providing mutual support to family members, and interacting with the outside world.

The operational definition of family resilience in adult cancer patients can be used as a theoretical basis for the development, improvement, or selection of measurement tools. According to a literature review, the existing assessment tools for family elasticity of adult cancer patients are mainly based on the family resilience theoretical model proposed by Walsh¹³. Therefore, the definition of adult cancer patients can be combined with the localized family resilience structure model to develop a specific family resilience assessment tool for these patients.²⁵ Researchers can use the operational definition to analyze whether existing family resilience assessment tools contain their defining attributes and determine appropriate assessment tools combined with research purposes, so as to improve the reliability of the results of measuring family resilience of adult cancer patients.

The operational definition of family resilience also provides the basis for the provision of nursing intervention strategies. The suggestion suggests that nurses can improve the outcome of patients from the two aspects of

patients themselves and their families, but how to effectively explore the family strength of adult cancer patients and implement nursing intervention to improve family resilience is still difficult. As the implementers of resilient family preparation, the operational definition of family resilience helps nurses to understand family resilience more directly, and encourages nurses to choose appropriate assessment tools to evaluate family resilience of adult cancer patients, so as to identify the families with low resilience early.

In the process of anticancer, a new balance and harmony of family order can be formed to achieve successful disease management.

Improving family resilience of cancer patients can not only help the patients themselves reduce psychological distress, obtain post-traumatic growth, establish a rich social support network, actively cope with cancer, and cooperate with treatment and health care, but also help to reduce the burden of caregivers and protect the mental health of family members.²⁶

A correct understanding of the concept of family elasticity of cancer patients, identification of families with low family elasticity, and appropriate, timely, and reasonable intervention are helpful to improve the quality of life of family members.²⁷

Nurses should pay attention to the resilience level of different families, provide corresponding support according to the uniqueness of the family, assist the family to learn from past challenges and actively cope with cancer, encourage effective communication between family members and reasonable catharsis of emotions,^{17,28} guide family members to think positively and give new meaning to cancer, help the family to find their own internal and external resources and develop new resources, and promote self-growth of the family.

8. Conclusions

Based on the concept analysis of Walker and Avant⁹, this paper further summarizes the family resilience of cancer patients. As a traumatic event in the family, cancer brings certain crises and pressure to the family, and family resilience is an important factor to support the positive response and positive development of their family. However, there are limitations in research on the family resilience of cancer patients in China. First, domestic measurement tools for family resilience of cancer patients were developed by students or families of sick children. Although there have been studies to further verify the adaptability of the scale in cancer groups, the items in the scale are not cancer-specific, and there is no measurement tool for family resilience developed with Chinese culture as the background, and the specific scale can be prepared in the following studies. Second,

there are few nursing and intervention studies on family resilience of cancer patients in China, so targeted interventions can be formulated and empirical research can be conducted based on Walsh's model.

Limitations

In this study, we acknowledge that the inclusion of only English and Chinese literature may limit the scope of our research, which may potentially cause us to overlook

papers published in other languages. This may have an impact on the overall findings of the study.

Ethical approval

Ethical issues are not involved in this paper.

Conflicts of interest

There is no conflicts of interest.

References

- Chhikara BS, Parang K. Global cancer statistics 2022: the trends projection analysis. *Chem Biol Lett*. 2022;10:451.
- Zheng RS, Sun KX, Zhang SW, et al. Report of cancer epidemiology in China, 2015. *Chin J Oncol*. 2019;41:19–28 (in Chinese).
- Roy PS, Saikia BJ. Cancer and cure: a critical analysis. *Indian J Cancer*. 2016;53:441–442.
- Molassiotis A, Wang M. Understanding and supporting informal cancer caregivers. *Curr Treat Options Oncol*. 2022;23:494–513.
- De Laurentis M, Rossana B, Andrea B, Riccardo T, Valentina I. The impact of social-emotional context in chronic cancer pain: patient-caregiver reverberations: Social-emotional context in chronic cancer pain. *Support Care Cancer*. 2019;27:705–713.
- Park M, Choi EK, Lyu CJ, Han JW, Hahn SM. Family resilience factors affecting family adaptation of children with cancer: a cross-sectional study. *Eur J Oncol Nurs*. 2022;56:102078.
- Hawley DR, DeHaan L. Toward a definition of family resilience: integrating life-span and family perspectives. *Fam Process*. 1996;35:283–298.
- Ghorbani M, Mohammadi E, Ramezani M. Developing a spiritual care model for clinical nurses: a theory synthesis. *Holist Nurs Pract*. 2022. DOI: 10.1097/HNP.0000000000000522.
- Walker LO, Avant KC. *Strategies for Theory Construction in Nursing*. 6th ed. Upper Saddle River, NJ: Pearson; 2019.
- Mc Cubbin HI, Marilyn AM. Typologies of resilient families: emerging roles of social class and ethnicity. *Fam Relat*. 1988;37:247–254.
- Faccio F, Renzi C, Giudice AV, Pravettoni G. Family resilience in the oncology setting: development of an integrative framework. *Front Psychol*. 2018; 9:666.
- Kazantzaki E, Kondylakis H, Koumakis L, et al. Psycho-emotional tools for better treatment adherence and therapeutic outcomes for cancer patients. *Stud Health Technol Inform*. 2016;224:129–134.
- Walsh F. The concept of family resilience: crisis and challenge. *Fam Process*. 1996;35:261–281.
- Yu L, Sun LM, Qi WY, Li YL. The relationship between family resilience, post-traumatic growth and quality of life in breast cancer patients. *Chin J Clin Psychol*. 2018;26:800–803 (in Chinese).
- Li QG, Hu JL, Zheng YW, Ruan H. Concept analysis and its application in nursing. *J Nurs Sci*. 2018;33:100–102 (in Chinese).
- McKinley CE, Saltzman LY, Theall KP. The weaving healthy families program: promoting parenting practices, family resilience, and communal mastery. *Fam process*. 2024;63:97–112.
- Soundararajan S, Jagannath S, Aysola J. Association between maternal health status and family resilience: results from a national survey. *Matern Child Health J*. 2023;27:307–317.
- Wang JY, Luo GY, Lv XQ, et al. Resilience of infertile families undergoing in vitro fertilization: an application of the double ABC-X model. *Appl Nurs Res*. 2023;69:151656.
- Huang Y, Chen M, Zhang Y, Chen X, Zhang L, Dong C. Finding family resilience in adversity: a grounded theory of families with children diagnosed with leukaemia. *J Clin Nurs*. 2023;32: 5160–5172.
- Wu XY, Ma HX, Zhang XL. Research progress of family resilience in children chronic diseases. *Chin J Child Health Care*. 2019;27:63–65 (in Chinese).
- Deng MJ. The Relationship Between Family Resilience and Quality of Life of Cancer Patients and Their Primary Caregivers. Da Lian: Dalian Medical University; 2019 (in Chinese).
- Zeng Y, Ou JJ, Yang JX, Li YM. Family resilience and influence factors in family of children with autism spectrum disorder. *Chin J Clin Psychol*. 2019;27:1271–1274 (in Chinese).

23. Chen JJ, Li HP, Zhang T, Wu DY, Wang YX, Wang QL. Family resilience and psychological resilience in cancer patients: chain mediating effect of perceived social support and meaning in life. *Chin J Clin Psychol*. 2019;27:1205–1209 (in Chinese).
24. 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:e12984.
25. Li M, Ma R, Zhang S, et al. Reliability and validity of the Chinese version of the family resilience questionnaire (FaRE Questionnaire) in patients with breast cancer: a cross-sectional study. *BMJ Open*. 2022;12:e051093.
26. Patterson JM. Promoting resilience in families experiencing stress. *Pediatr Clin North Am*. 1995;42:47–63.
27. Jiménez S, Moral RJ, Varela M, et al. Resilience measurement scale in family caregivers of children with cancer: multidimensional item response theory modeling. *Front Psychiatry*. 2023;13:985456.
28. Huang J, Xu L, Xu Z, et al. The relationship among pregnancy-related anxiety, perceived social support, family function and resilience in Chinese pregnant women: a structural equation modeling analysis. *BMC Women's Health*. 2022;22:546.