# Hope in children with cancer: A narrative review and a concept synthesis

Kodchakon Piasai<sup>1</sup>, Sasitorn Phumdoung<sup>2</sup>, Songsuda Muenthaisong<sup>3</sup>, Natchira Winitchai<sup>4</sup>, Windy Rakhmawati<sup>5</sup>

- <sup>1</sup> Head of School of Pediatric Nursing, Institute of Nursing, Suranaree University of Technology, Muang Nakhon Ratchasima, Thailand
- <sup>2</sup> Professor, Faculty of Nursing, Prince of Songkla University, Thailand
- <sup>3</sup> Boromarajonani college of nursing, Khon Kaen, Thailand
- <sup>4</sup> School of Family Health and Midwifery Nursing, Institute of Nursing, Suranaree University of Technology, Thailand
- <sup>5</sup> Faculty of Nursing, Universitas Padjadjaran, Indonesia

## **Abstract**

**Background:** Hospitalized children with cancer encounter pain, suffering, fear, and life-threatening situations which can cause them to feel hopeless. **Purpose:** The aims of this study are to acquire new insights about the concept of hope in children with cancer and to identify the attributes, antecedents, and consequences of hope in children with cancer.

**Methods:** Nine English and Thai-language studies that discussed the hope in children or adolescents with cancer were located using the online database in nursing (1990–2023). Qualitative analysis and synthesis of these studies were completed using an adaptation of Walker and Avant's concept synthesis method.

Results: The antecedents of hope of children with cancer were hope of other persons surrounding them and the relationship between these children and others. The attributes of hope in children with cancer were hope for cure, intentional hope and inner strength. Also, the consequences of hope in children with cancer were well-being, quality of life, coping behavior, expressing new feelings of safety or comfort, and conveying trust to others. Conclusion: This study found that hope is important and has a positive effect on body-mind and the emotions of children with cancer. Thus, healthcare providers such as nurses should enhance hope in children with cancer by promoting their inner resources, positive experiences, and emotional support, while decreasing negative emotional factors. Therefore, children with cancer have hope in their treatment outcomes and inner strength, leading to their expressing new feelings of safety and a good quality of life.

Keywords: cancer; children; concept analysis; concept synthesis; hope

# Introduction

Cancer is presently a leading cause of deaths worldwide both in adults and children (World Health Organization, 2022). In Thailand also, cancer remains an important problem in the country's public health (Tiankanon, Aniwan, & Rerknimitr, 2021). Cancer in children has negative effects on both the children and all of their family members, resulting in physical and psychological problems (Lewandowska et al., 2021). Children with cancer not only suffer from cancer but also the procedures for investigation or treatment, and from hospitalization. They encounter pain, suffering, fear, and life-threatening predicaments (Matziou et al., 2016), which can cause them to feel hopeless.

Psychological distresses, such as anxiety, distress, depression, and hopelessness, are normal feelings within patients with a threatening illness, whether adults or children. Particularly in children with cancer, there are many negative effects from the disease, treatments, and hospitalization. Hope encourages persons encountering a crisis and having hope can result in successful experiences (Rosenbaum & Spiegel, 2023) and help patients to have trust in their healthcare providers (Hendricks-Ferguson,

G OPEN ACCESS

# Jurnal Keperawatan Padjadjaran (JKP)

Volume 12(1), 98-104 © The Author(s) 2024 http://dx.doi.org/10.24198/jkp. v12i1.2341

#### Article Info

Received : August 02, 2023 Revised : February 05, 2024 Accepted : February 15, 2024 Published : April 01, 2024

# \*Corresponding author

Sasitorn Phumdoung\*

Professor, Faculty of Nursing, Prince of Songkla University, Thailand; Address: Faculty of Nursing, PSU 15 Karnjanavanich Road, Hat Yai, Songkhla, Thailand 90110, Phone: +66869660115. E-mail: Sasitorn.ph@psu.ac.th

#### Citation

Piasai, K., Phumdoung, S., Muenthaisong, S., Winitchai, N., & Rakhmawati, W. (2024). Hope in children with cancer: A narrative review and a concept synthesis. *Jurnal Keperawatan Padjadjaran*, 12(1), 98-104. http://dx.doi.org/10.24198/jkp.v12i1.2341

#### Website

http://jkp.fkep.unpad.ac.id/index.php/jkp

This is an **Open Access** article distributed under the terms of the Creative Commons Attribution-Non-Commercial 4.0 International License.

E-ISSN: 2442-7276 P-ISSN: 2338-5324 Phumdoung, S., et al. (2024)

1997). A threatening illness caused by cancer is a crisis for patients and their family. Moreover, it is also a stressful event for the parents of children with cancer (Deribe et al., 2023). Hope is related to feelings, thinking and experiences as an inner resource (TenHouten, 2023). It can have a different effect from one person to another person, especially family members. Also, levels of hope can increase or decrease due to related situations.

Hope in patients with cancer has been studied by many researchers in both quantitative and qualitative studies. In children, hope is an abstract and, therefore, difficult for children to understand. The spiritual part of children is not well-understood yet, and it is important to know more about the hope of children with cancer.

This study describes the use of the concept synthesis method by Walker and Avant (2005) to develop the concept of hope in children for extracting meaningful categories and behavior from previous studies. The empirical studies have been identified

as key to the investigation of the literary synthesis of hope in children with cancer.

This literary synthesis report was undertaken to acquire new insights about the concept of hope in children with cancer. Also, the authors identify the attributes, antecedents, and consequences of hope in children with cancer.

#### Methods

### Search strategy

The empirical studies about hope in children were identified through a computerized search of Clinicalkey, ProQuest, USMLeasy, Access Medicine, Cochrane Library, Scopus, Wiley Online Library, BestPractice, SpringerLink, BML Journal online, CINAHL, OvidSP, ClinicalEvidence, PubMed, and Google Scholar for the period from 1990–2023. The keywords for searching were: hope, children or child or childhood, and cancer or oncology. The inclusion criteria were: (1) database research (2) concepts

Table 1. Meaning of hope in children

Authors	Participants	Methodology and Measurement	Definition
Promsripitak (2000)	Children with leukemia age between 6-12 years.	Correlational research (Quantitative), Herth Hope Index	Hope is stage of mind like confidence in expectation to be successful in the future, hope is the thought and feeling that can resolve complicated situations.  Hope has positive correlation with coping behavior of school-age children with leukemia.
Snyder (2003)	Children aged between 7-13 years.	Children's Hope Scale	Hope is defined as goal-directed thinking in which the person has the perceived capacity to find routes to goals (Pathways thinking) and motivation to use those routes (Agency thinking).

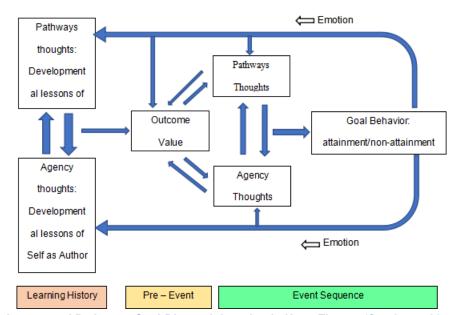


Figure 1. Agency and Pathways Goal-Directed thoughts in Hope Theory. (Snyder and Lopez, (2002) Handbook of positive psychology. New York, NY: Oxford University Press)

associated with hope in patients with cancer, such as hope in children or adolescents with cancer, hope in parents or caregivers, hope in siblings of children with cancer, and hope in healthcare providers, and (3) online publication. The selected articles are those that comprise the attributes and/or antecedents or consequences of hope. Totally, nine articles that were published from 1995 to 2017 were chosen. The step of concept development was performed following Walker and Avant (2005).

The first concept development step was to select the articles that were closest to the concept of hope in children with cancer. The next step was to divide the group of articles that were relevant to the hope of children with cancer. There are four groupings, titled: (a) hope in children with cancer, (b) hope in adolescents with cancer, (c) hope in caregivers or parents who care for children with cancer, and (d) hope in healthcare providers who care for children

with cancer. There are three articles of hope in children, three articles of hope in adolescents with cancer, and four articles of hope in parents and healthcare providers. The field results of definition of hope in children are shown in Table 1. Moreover, the results of the antecedents, attributes, and consequences of hope in children are shown in Table 2.

#### Results

The model of hope from a previous study shows that hopeful thought reflects the belief that one can find pathways to desired goals and become motivated to use those pathways. Then, when people feel hopeful, this hope can drive their emotions and well-being. Snyder (2002) reported that there are three main aspects that make up hopefulness: goals, the pathway and the agency. The meaning

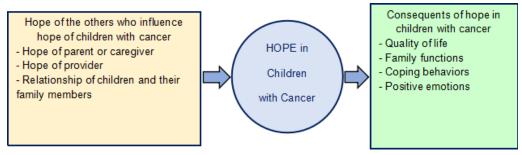


Figure 2. Factors influencing hope in children with cancer and consequences

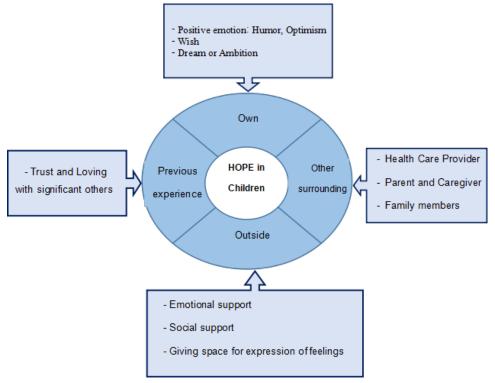


Figure 3. Model of antecedents of hope in children with cancer

Jurnal Keperawatan Padjadjaran, Volume 12 Issue 1 April 2024

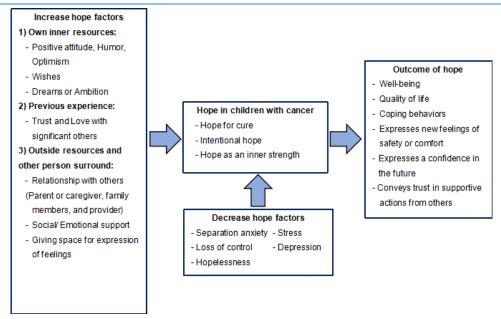


Figure 4. The model of hope in children with cancer

of goal is approaching life in a goal-oriented way. The pathway is finding different ways to achieve one's goal. Lastly, agency is believing that a person can instigate change and achieve these goals. The details of Snyder's hope theory can be seen in Figure 1:

This study developed the concept of hope in children with cancer by using the information of hope from the literature review; although there is not a direct research study of hope in children with cancer, there is close pattern of hope in children with cancer. This study attempted to search for articles which studied hope in children with cancer but only quantitative studies were found and most of the research was undertaken in parents or caregivers of children. For this study, hope in children with cancer can be summarized as: the factors that influence hope in children with cancer and consequences as shown in Figure 2, and the model of antecedents of hope in children with cancer as shown in Figure 3. Finally, the model of hope in children with cancer is shown in Figure 4.

#### Discussion

# Evaluation of Concept Development of Hope in Children with Cancer

According to the review of the literature, there is little research that studies hope directly in children with cancer. However, it can be concluded that the studies conducted in regard to hope in children with cancer yielded the following research contexts: hope in parents of children with cancer or hope in adolescents with cancer. This study reports on the antecedents of hope that influence, increase and decrease in the hope factor, attributes of hope in children with cancer, and outcomes or consequences of hope.

Antecedents of hope in children with cancer which increase hope factors are: 1) Own inner resources, such as, positive attitude, humor, optimism, wishes, dreams or ambition; 2) Previous experiences, such as, trust and love with significant others; 3) Outside resources and other surrounding persons, such as, relationship with others (parents or caregiver, family members, and provider), social/emotional support, respect, and giving space for the expression of feelings. On the other hand, antecedents of hope in children with cancer which decrease hope factors are: separation anxiety, stress, loss of control, depression, and hopelessness.

The consequences of hope in children with cancer are: well-being, quality of life, coping behavior, expressing new feelings of safety or comfort, expressing a confidence in the future, and conveying trust in supportive actions from others.

#### **Conclusions**

Hope in children with cancer refers to the thought and feelings involving the self-perceptions that children have confidence in the expectation to be successful and resolve complicate situations. For the antecedents of hope of children with cancer, there were both positive and negative effects on hope. However, for the consequences of hope were many all-positive affects to children: well-being, quality of life, coping behavior, expressing the new feeling of safety and a confidence in the future, and conveying trust in supportive actions from others. Thus, pediatric healthcare providers such as nurses should enhance hope of children with cancer and their caregivers. On the other hand, nurses should eliminate the factors that decrease hope of children with cancer (separation anxiety, stress, loss of control, and depression) to protect these children from a sense of hopelessness.

Jurnal Keperawatan Padjadjaran, Volume 12 Issue 1 April 2024

Table 2. Antecedent, attributes, and consequences of hope in children with cancer

		between child and family tion of information ncertainty liarity for example new treatments, admission to unit symptom pattern or unfamiliar symptoms lan communication isclosure cure on-related hope among d with cancer er perspective		+ Relationship between child and family + Communication of information - Prognostic uncertainty - Event unfamiliarity for example new treatments, admission to intensive care unit - Inconsistent symptom pattern - Unexpected or unfamiliar symptoms - Prognostic disclosure - Prognostic disclosure - Likelihood of cure Communication-related hope among parents of child with cancer Age and gender + Social support + Self esteem + Optimism
n - Hopeful - Trusts in the physician - Manage and decrease distress of prognosis - Life satisfaction + Health practices + Well being + Purpose + Academic achievement + Positive affect - Life satisfaction + Positive affect - Life satisfaction + Positive affect - Life satisfaction + Academic achievement + Academic achievement + Positive affect - Life satisfact -	n communication blosure related hope among with cancer	n communication closure re related hope among with cancer	Parent-physician communication - Prognostic disclosure Likelihood of cure Communication-related hope among parents of child with cancer Age and gender + Social support + Self esteem + Optimism + Future time perspective	children - hope for cure Parent-physician communication - Prognostic disclosure Likelihood of cure Communication-related hope among parents of child with cancer Age and gender + Social support + Self esteem + Optimism
+ Life s + Healt + Well 1 + Purpot + Acad + Posit	rspective	s srspective	srspective	Age and gender + Social support + Self esteem + Optimism
- memalizing behaviors - Externalizing behaviors - Substance use - Negative effect		SS SS		rspective
g and loving relationshessful learning experianment being diagnosed w	experience in trusting and loving relationsly others experience with successful learning experions successful goal obtainment ul stimulus, for example being diagnosed ware the stimulus of the example being diagnosed was successful to the example to the exa		- Depression - Anxiety - positive thinking or significant others - reality-based and successful goal obtainment - positive future for self stressful stimulus, for example being diagnosed wor others - positive support - systems	self self
	sness lon experience in trusting others experience with succial successful goal obta ul stimulus, for examp		- <del>-</del> - <del>-</del>	- positive thinking or optimism - reality-based and future-oriented goals - positive future for self or others - positive support systems

Cont. Table 2. Antecedent, attributes, and consequences of hope in children with cancer

Author(s)	Participants	Attributes	Antecedents	Conseduences
Juvakka and Kylmä (2009)	Adolescents with cancer aged between 16-21 years	- intentional hope - hope as an inner strength	Own inner resources - positive attitude towards life - humor - belief in God - wishes, dreams - conception about the flow of time Factors situated between an adolescent and their surroundings - positive information - positive perception - limitation - focusing thoughts on other things - continuity and stability of everyday life Social network - emotional support - giving space for expression of feelings	Factors endangering adolescent hope (Not outcome from hope) Feelings - fears - grief due to giving up familiar everyday life and giving up one's identity Knowledge - information about the illness - information closely related to the illness - information closely related to the illness
Santos et al. (2015)	Parents and children and adolescents with cancer (8-20 years)		- Tespect and allowing individuality - level of family rituals - parent's hope	Quality of life
Conway et al. (2017)	Parents of children 18 years old or younger		<ul> <li>+ Staff's caring actions</li> <li>+ positive connection staff</li> <li>- received negative news</li> <li>- children negative experience with procedure and symptoms uncontrolled</li> </ul>	

#### **Acknowledgement**

The findings and conclusions in this document are those of the authors, who are responsible for its contents

## **Funding Statement**

none.

#### **Conflict of Interest Statement**

The authors have declared no potential conflicts of interest.

#### **Data Availability**

none.

#### References

- Conway, M. F., Pantaleao, A., & Popp, J. M. (2017).

  Parents' experience of hope when their child has cancer: Perceived meaning and the influence of health care professionals. *Journal of Pediatric Oncology Nursing*, *34*(6), 427-434. https://doi.org/10.1177/1043454217713454
- Deribe, L., Addissie, A., Girma, E., Abraha, A., Adam, H., & Lindström, N. B. (2023). Stress and coping strategies among parents of children with cancer at Tikur Anbessa Specialized Hospital Paediatric Oncology Unit, Ethiopia: A phenomenological study. *BMJ Open* 2023;13:e065090 https://doi.10.1136/bmjopen-2022-065090
- Esteves, M, Scoloveno, R.L., Mahat, G., Yarcheski, A., & Scoloveno, M.A. (2013). An integrative review of adolescent hope. *Journal of Pediatric Nursing*, 28(2),105-113. https://doi.10.1016/j.pedn.2012.03.033
- Graves, S.D. & Aranda, S. (2008). Living with hope and fear the uncertainty of childhood cancer after relapse. *Cancer Nurs.*, 31(4), 292-301. https://doi.10.1097/01. NCC.0000305745.41582.73
- Hendricks-Ferguson, V.L. (1997). An analysis of the concept of hope in the adolescent with cancer. *JournalofPediatricOncologyNursing*, 14(2), 73-80. https://doi.10.1177/104345429701400205
- Juvakka, T. & Kylmä, J. (2009). Hope in adolescents with cancer. *European Journal of Oncology Nursing*, 13(3), 193-199. https://doi.10.1016/j.ejon.2008.12.004
- Lewandowska A. (2021). Influence of a child's cancer on the functioning of their family. *Children*, 8(7), 592. https://doi.10.3390/children8070592 Mack, J. W., Wolfe, J., Cook, E. F., Grier, H.

- E., Cleary, P. D., & Weeks, J. C. (2007). Hope and prognostic disclosure. *Journal of Clinical Oncology*, 25(35), 5636-5642. https://doi.10.1200/JCO.2007.12.6110
- Matziou, V., Vlachioti, E., Megapanou, E., Ntoumou, A., Dionisakopoulou, C., Dimitriou, V., Tsoumakas, K., Matziou, T., & Perdikaris, P. (2016). Perceptions of children and their parents about the pain experienced during their hospitalization and its impact on parents' quality of life, *Japanese Journal of Clinical Oncology*, 46(9), 862–870, https://doi.org/10.1093/jjco/hyw074
- Promsripitak, N. (2000). Hope and coping in school-age children with leukemia undergoing chemotherapy, [MSc. Thesis]. Faculty of Nursing, Khon Kaen University. Khon Kaen, Thailand, 106p.
- Rosenbaum, E. H., & Spiegel, D. (n.d.). Hope as a Strategy. Stanford Medicine. Retrieved July 9, 2023, from https://med.stanford.edu/survivingcancer/cancers-existential-questions/hope-as-a-strategy.html
- Santos, S., Crespo, C., Canavarro, C., & Kazak, A.E. (2015). Family rituals and quality of life in children with cancer and their parents: The role of family cohesion and hope. *Journal of Pediatric Psychology, 40*(7), 664-671. https://doi.10.1093/jpepsy/jsv013
- Snyder, C.R. (2003). Measuring hope in children: Hope in children. *Child Trends*. https://cms.childtrends.org/wp-content/uploads/2013/05/Child\_Trends-2003\_03\_12\_PD\_PDConfSnyder.pdf
- Snyder, C.R., & Lopez, S.J. (2002). Handbook of positive psychology. Oxford University Press, NY, 826p.
- TenHouten, W. (2023). The emotions of hope: From optimism to sanguinity, from pessimism to despair. *The American Sociologist*, *54*, 76–100. https://doi.org/10.1007/s12108-022-09544-1
- Tiankanon, K., Aniwan, S., & Rerknimitr, R. (2021). Current status of colorectal cancer and its public health burden in Thailand. *Clinical Endoscopy, 54,* 499-504. https://doi.org/10.5946/ce.2020.245-IDEN
- Walker, L. O., & Avant, K. C. (2005). Strategies for theory construction in nursing (4th ed.). New Jersey: Prentice Hall.
- World Health Organization. (2022, February 3). Cancer. https://www.who.int/news-room/fact-sheets/detail/cancer