

## Exploring the supportive care needs for people with cancer undergoing chemotherapy: a qualitative descriptive study

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### ABSTRACT

**Introduction:** Chemotherapy's side effects cause people with cancer to encounter difficult situations that might impact their supportive care needs. Exploration of supportive care needs may assist the nurse in improving the quality of life of people with cancer undergoing chemotherapy (PwCUC). Therefore, this study aims to explore the supportive care needs of PwCUCs.

**Methods:** A qualitative descriptive study from November 2021 until May 2022 was utilized through in-depth interviews and Focus Group Discussions (FGD) in three public health centers in Jember, Indonesia. Data saturation was achieved after the researcher conducted an in-depth interview of 27 informants and FGD of 13 informants. A total 40 informants from PwCUCs, family of PwCUCs, doctors, and nurses was recruited based on inclusion criteria using purposive sampling technique. The researcher developed an in-depth interview and FGD guidelines to collect the data. Six-step thematic analysis was used. Triangulation, member-checking, and thick description were performed to maintain trustworthiness.

**Results:** The study yielded four themes that represent participants' voices. These were 1) social support needs, 2) accompanying needs, 3) information needs, and 4) healthcare service support.

**Conclusions:** Supportive care needs for PwCUCs is a complex and contextual phenomenon. This study revealed that PwCUCs required individual, social, and healthcare service support to meet their needs. Therefore, further study is required regarding developing a nursing care plan for PwCUCs based on cultural-sensitive supportive care needs.

**Keywords:** healthcare service system, people with cancer, supportive care needs, qualitative study

### Introduction

Cancer is still a major public health issue across the world. Cancer is the cause of death in one in six persons (WHO, [2020](#)). In 2020, there were 19.3 million new cases with mortality. up by 10 million (Sung et al., [2021](#)). Cancer incidences in Indonesia grew to 2.6 million in 2021, up from 1 million in 2018 (Ministry of Health, [2022](#)). Furthermore, in SDGs issues, globally, premature death (30-69 years) because of cancer decreases but insignificantly. Whereas, the SDGs aim to reduce one third premature death by 2030 relative to 2015 level

(Bennett et al., [2020](#)). As a result, reaching this goal will need a concerted effort. The WHO already has a priority plan for dealing with cancer issues, particularly in order to meet the SDG's objectives. Improving the quality of treatment for people with cancer is a part of their aims (WHO, [2020](#)).

One of the cancer treatments is cytotoxic chemotherapy. Chemotherapy can improve the quality of life of people with cancers and also increase their life expectancy (Parkes et al., [2019](#)). In Indonesia, people with cancer with chemotherapy are 24.9% of the total



people with cancer (Ministry of Health, [2018](#)). However, chemotherapy can affect the physical, psychological, and social life of people with cancers (Suwankhong and Liamputtong, [2018](#)). People with cancer undergoing chemotherapy have a complex problem. In general, chemotherapy will affect the patient's physical condition due to the side effects and will cause trauma to daily life activities (Wampaalu et al., [2016](#)). Moreover, people with cancer with chemotherapy need adequate social support in facing the chemotherapy process, which is a long-term care treatment (Shahrokni et al., [2020](#)). Therefore, people with cancer and during the chemotherapy process make PWC have complex needs and needs to be explored.

Supportive care is defined as providing health promotion, curative support, palliative care, and bereavement services to patients and caregivers that meet their physical, psychological, social, informational, and spiritual needs during their diagnostic, treatment, or rehabilitation phases (Boyes, Girgis and Lecathelinais, [2009](#); Hui et al., [2013](#); Hui, [2014](#)). Supportive care aims to improve the QoL of patients with severe or life-threatening diseases (Choi et al., [2022](#)). In the context of people with cancer, supportive care is constructed from human needs, cognitive appraisal, and coping adaptation conceptualized from the cancer experience (Fitch, [2008](#)). In previous study in the cancer context, several studies regarding supportive care needs have been performed in quantitative, qualitative and systematic review approaches. In Iran, a qualitative study on cancer patients found that the main needs of cancer patients are deficiencies in disease management and the importance of a sympathetic and knowledgeable caregiver (Mazhari and Khoshnood, [2021](#)). In another context, Chua and Tan ([2020](#)) found that the supportive needs of cancer patients with ambulatory treatment including chemotherapy in Singapore were focused on psychosocial and supportive care needs, information needs and information delivery by health professionals.

Furthermore, Boyes, Girgis and Lecathelinais ([2009](#)) have formulated a tool to measure supportive care needs for cancer patients with five domains. This questionnaire has been performed in Brazil for all cancer patients with ambulatory treatment (Calvo, Sepulveda-Carrillo and Judith, [2017](#)), in Japan for colorectal cancer (Sakamoto et al., [2017](#)), in Indonesia for gynecological cancer (Putri et al., [2018](#)) and in the Netherlands for head and neck cancer (Jansen et al., [2016](#)). Those studies explored the supportive care needs in various cancer patients' contexts using five domains with different results. Nonetheless, many scholars argue that

expanding supportive care needs through a subjective view could see the nature of supportive care needs in people with cancer holistically and comprehensively (Chua and Tan, [2020](#); Mazhari and Khoshnood, [2021](#); Khan et al., [2022](#)). In another research approach, Wabula, Yunitasari and Wahyudi ([2020](#)) and Webb et al. ([2021](#)) reviewed quantitative and qualitative articles to expose a synthesis of support and care needs in people with cancer.

Although existing studies have discussed supportive care needs in many contexts and approaches, surprisingly, studies focusing on cancer patients undergoing chemotherapy (PwCUC) are rarely conducted, even though the complex conditions of chemotherapy may differ from cancer with other treatments. Furthermore, in Indonesia, studies discussing supportive care needs are scarce. From the literature review results, only one quantitative study was found related to supportive care needs, but focusing on gynecological cancer, not general cancer cases.

In addition, in terms of meeting the needs for supportive care, PwCUCs are linked to other social support systems (Tamulee, [2013](#); Røen et al., [2019](#)). Families and healthcare providers are the significant support systems that influence PwCUCs in meeting their supportive care needs (Berman et al., [2020](#)). Description of supportive care needs requires study with multi-perspective views from other systems of PwCUCs. Supportive and care needs are multidimensional, contextual, subjective and ambiguous; this study aimed to explore the supportive and care needs of PwCUCs using a qualitative approach.

## Materials and Methods.

This study utilized a qualitative descriptive study design (Doyle et al., [2020](#)). In addition, the Multiple Perspective Interviews (MPI) method was used for triangulation analysis. MPI is a type of qualitative analysis that involves the use of multiple informant groups. MPI can also be used to preserve the credibility of qualitative data (Vogl, Schmidt and Zartler, [2019](#)). Three public health center areas: Kaliwates, Jember Kidul, and Gladak Pakem, were involved in the Jember region of Indonesia. These three public health centers have the highest number of cancer patients in the Jember area. This research was conducted on PwCUCs diagnosed as cancer by a doctor, registered in the public health center, aged 18-70 years, able to communicate without memory and hearing impairment, and had

chemotherapy treatment in one of the private hospitals in Jember.

Moreover, in seeing multiple perspectives, other informants were recruited. Other informants are families of PwCUCs at least 18 years old, have no memory impairment, average hearing ability, can communicate and live together with patients and care for patients' daily lives for more than one year during the chemotherapy process. Furthermore, the informants were also healthcare providers (doctors and nurses) who worked in the hospital or community. Purposive sampling was utilized in this study.

The data were collected through in-depth interviews and Focus Group Discussions (FGD) with three groups of informants (PwCUCs, family of PwCUCs and healthcare providers). As many as 27 informants were recruited for in-depth interview: nine PwCUC, eight families of PwCUCs, eight nurses, and two doctors. In-depth interviews used interview guidelines and were conducted in two sessions for each informant. The in-depth interview duration was 40-60 minutes per session face-to-face with informants and were held from November 2021 to March 2022. All researchers conducted in-depth interviews at the informant's home and used a tape recorder. Researchers obtained patient address information from medical records in one of the private hospitals in Jember. Saturation of data is an indicator of the number of recruited informants. Researchers discussed to determine data saturation in every informant. The list of questions from the in-depth interview can be seen in Table 1. The Indonesian language was used in the in-depth interview and FGD.

Moreover, in the FGD method, three groups were recruited. There were four informants in PwC undergoing chemotherapy, four in the family of PwC undergoing chemotherapy, and five healthcare providers (HCP) including one doctor and four nurses. FGD was conducted in one session of 60-90 minutes. The FGD was held in April-May 2022. The FGD was conducted online through the Zoom application and the FGD process recorded using application tools. To ensure that the online FGD activities ran well, the researchers added inclusion criteria for informants in the FGDs by having a compatible device for Google/Zoom meetings, either mobile phones or personal computers.

MZA conducted both in-depth interviews and FGDs and KN provided input regarding the interview guide. All transcripts of both in-depth interviews and FGDs were translated into English. It is important because the research was conducted in Indonesia, and KN is a non-Indonesian researcher. For the translating framework,

Table 1 List of questions for informant in in-depth interview and FGD

<b>List of Questions</b>	
<b>For PwCUC</b>	
1.	How do you feel about conducting chemotherapy treatment?
2.	Could you tell me, what your important needs are during chemotherapy?
3.	How does your family respond to your condition?
4.	How do HCPs or volunteers near you respond to your condition?
5.	How do you fulfill your basic needs when you undergo chemotherapy?
6.	What support and care do you expect from family, HCPs and volunteers related to your condition now?
<b>For family of PwCUC</b>	
1.	What do you think about chemotherapy?
2.	As your experience, what do people with cancer want during her/his treatment?
3.	Do you think people with cancer are satisfied with the healthcare service and volunteering service?
4.	As family, what do you expect from HCPs and volunteers related to your family's condition?
<b>For HCP</b>	
1.	What do you think about PwCUCs?
2.	Could you talk about your experience during caring for a PwCUC?
3.	In your experience, what do people with cancer want during her/his treatment?
4.	Do you think people with cancer are satisfied with the healthcare service and volunteering service?

the researcher used the Abfalter, Mueller-Seeger and Raich (2021) framework translated from all stages.

Furthermore, researchers used code to facilitate analysis and maintain the confidentiality of informants. The codes used for in-depth interviews and PwC FGDs were IDI-P 1-9 and FGD-P 1-4. Then, the code for the family of a PwC was IDI-F 1-8 and FGD-F 1-4. Lastly, IDI-H 1-10 and FGD-H 1-5 were used for HCPs.

In this study, researchers utilized a six-step thematic analysis from Braun and Clarke (2019): Familiarizing the data: Generating initial codes: Searching for themes: Reviewing themes: Defining and naming themes: Producing the report. After making transcripts of all in-depth interviews and FGDs, MZA and KN did the initial codes from each sentence with meaning and searching themes. Next, KN reviewed the themes based on the supportive care needs' theoretical framework to help researchers to analyze the themes. Finally, MZA and KN defined and named the themes and produced the report. In addition, researchers utilized multiple perspective interview analyses. Researchers compared each datum to understand contrasts and overlaps in every group of informants (Vogl, Schmidt and Zartler, 2019). After compiling the themes and making a report, MZA returned the analysis results to the informants for correction and feedback. Researchers utilized ATLAS.ti

version 8.4.4 to help manage data. To maintain quality for this research report, the 32 items of the Consolidated criteria for Reporting Qualitative Research (COREQ) checklist were utilized (Tong et al., 2012).

In maintaining accurate interpretation (credibility), the researcher used triangulation in informants and methods. In the triangulation technique, given a complete result, the researcher recruited not only PwCUCs as informants but also the family of PwCUCs and HCPs. Also, triangulation data utilized the FGD method to complement the in-depth interview method. Moreover, the researchers also did member checking by involving 31 informants to provide feedback on the themes that had been made. In ensuring that the result can be transferred in another context (transferability), the researcher conducted a thick description by contrasting and comparing the results with experienced researchers. The researcher conducted an audit trail to maintain the stability of findings (dependability and confirmability). Researchers recorded the research process from the beginning to the end of the research process.

This research obtained a permit from The Khon Kaen University ethics committee with number HE642139 on August 12, 2021. The researcher has also obtained permission from the Jember Health Department, the Public Health Centre and the private hospital. When collecting data, the informants could choose to withdraw without further prejudice. The researcher ensured that all informants remained anonymous. In addition, the researcher verified that the informants' privacy and confidentiality were protected. The researcher did not use a specific name and relied on the code instead. The researcher also kept all documents from informants securely.

## Results

Forty participants agreed to be informants in the in-depth interviews and FGDs from 42 targets of the participants who met the inclusion criteria. One PwCUC and one family of a PwCUC refused to be an informant because of family conditions. However, using 40 informants, the data met saturation. The majority of informants of PwC, either in-depth interview or FGD, were married women with a mean age of 52.3±10.9 and 44±6.3, respectively. In the family of PwC, the majority in in-depth interviews were men and a husband. The FGD group mainly included the husband and the same proportion between men and women. The average age of the family of PwC was 47.9±13.1 in an in-depth interview and 40.7±12.6 in FGD. Furthermore, in HCPs,

Table 2 Informants' characteristics in in-depth interview

Informant Characteristic	Frequency	Percentages (%)
<b>PwCUC (n=9)</b>		
Gender		
Female	8	88.9
Male	1	11.1
Age (Mean±SD)	52.3±10.9	
Married status		
Married	6	66.7
Widowed	3	33.3
Level of Education		
Elementary school	1	9.1
Junior high school	0	0
Senior high school	3	33.3
Bachelor	5	55.6
Duration of Chemotherapy		
2 years	4	44.4
More than 2 years	5	55.6
<b>Family of PwCUC (n=8)</b>		
Gender		
Female	3	37.5
Male	5	62.5
Age (Mean±SD)	47.9±13.1	
Married status		
Married	8	100
Widowed	0	0
Level of Education		
Elementary school	0	0
Junior high school	0	0
Senior high school	2	25
Bachelor	6	75
PwC relationship		
Husband/wife	4	50
Child	3	37.5
Sister/brother	0	0
Others	1	12.5
<b>HCPs (n=10)</b>		
Gender		
Female	5	50
Male	5	50
Age (Mean±SD)	38.7±9.2	
Profession		
Chemotherapy nurse	2	20
Public health center's nurse	6	60
Chemotherapy doctor	1	10
Public health center's doctor	1	10

the majority was a nurse, either in FGD or in-depth interview.

The in-depth interviews had the same proportion between men and women, with 38.7±9.2 in average age. However, in FGD, all informants were women with 34.2±3.6 in average age. Details can be seen in [Table 2](#) and [Table 3](#).

All researchers analyzed transcript results from in-depth interviews and FGDs. Using MIP analysis, researchers also compared each group of informants, namely PwCUCs, the family of PwCUCs, and HCPs. Twenty-seven codes were found in in-depth interviews and FGDs. Then the researchers extracted four themes based on grouping codes that had been discussed together. The themes are 1) social support needs, 2) accompanying needs, 3) information needs, and 4) healthcare service support.

Table 3 Informants' characteristics in in FGD

Informant Characteristic	Frequency	Percentages (%)
<b>PwCUC group (n=4)</b>		
Gender		
Female	4	100
Male	0	0
Age (Mean±SD)		44±6.3
Married status		
Married	3	75
Widowed	1	25
Level of Education		
Elementary school	0	0
Junior high school	0	0
Senior high school	1	25
Bachelor	3	75
Duration of Chemotherapy		
2 years	2	50
More than 2 years	2	50
<b>Family of PwCUC group (n=4)</b>		
Gender		
Female	2	50
Male	2	50
Age (Mean±SD)		40.7±12.6
Married status		
Married	3	75
Widowed	0	0
Not married	1	25
Level of Education		
Elementary school	1	25
Junior high school	0	0
Senior high school	1	25
Bachelor	2	50
PwCUC relationship		
Husband/wife	2	50
Child	1	25
Sister/brother	1	25
Others	0	0
<b>HCPs group (n=5)</b>		
Gender		
Female	5	100
Male	0	0
Age (Mean±SD)		34.2±3.6
Profession		
Chemotherapy nurse	2	40
Public health center's nurse	2	40
Chemotherapy doctor	0	0
Public health center's doctor	1	20

**Theme 1: Social support needs**

Based on the informants' results, the social support needs of PwCUCs consisted of environmental, peer, and family support. In environmental support, the informants stated that environmental management such as Public Health Center (PHC), neighbors and surroundings from PwCUCs needed optimal management. Moreover, supportive management of the environment can reduce PwC stress and is an essential requirement for PwCUCs. It can be seen in the statement in the in-depth interview:

*"We need support from neighbors, not only from family. Neighbors know more about our condition.*

*Support from the environment, such as neighbors or from cadres, is important to us." (IDI-P 7).*

*"Apart support from the family, also support from the Puskesmas (PHC), from the surrounding environment support, it's also possible, cancer patients need support like that." (IDI-H 2)*

Then, the need for peer support is part of PwCUC's social support needs. The peer support referred to support from cancer survivors and close friends. The informant explained that having peer support, both from cancer survival and close friends, can have a different impact and increase PwCUCs' resilience in dealing with their condition, as in the quote below:

*"Sometimes a cancer survivor has more support (from friends) than family in my opinion." (IDI-P 9)*

*"It might just be prayer and support from those who were close to me to pray for me to be tough to face this problem. Then, I could be resilient, it's been incredible for me."(IDI-P 3)*

Lastly, the social support needs expressed by the informants were family support needs. Informants explained that family support could come from husband/wife, children, and siblings. The informants also explained that the form of support is a prayer given to PwC. In addition, support can take the form of helping all PwCUCs' needs, both physical and psychological. Several informants also mentioned that support motivates PwCUCs to be more decisive in dealing with their illness. It can be seen in the quotes from PwCUCs below:

*"Family is really important, it's important to me. If anything happens, first, I will contact the family." (IDI-P 9)*

*"Support from my family is very meaningful. They helped me when I was weak." (FGD-P 2)*

A HCP also confirmed that family needs are essential support for PwCUCs. The HCP said:

*"In my opinion, they need support from my family about the disease, right? Some chemotherapy programs are long, some are short, so it needs support from family too." (FGD-H 2)*

**Theme 2: Accompanying needs**

According to informants, accompanying needs are the needs for PwCUCs to be accompanied by family, peers, or significant others, such as volunteers. Accompanying is a "being there" and is not deeply involved in the patient's treatment process.

Accompanying needs focus on intimacy and the presence of a significant other. The situation stated by an informant was that when a friend or colleague who was there accompanied him at home or in the hospital, it was thought that he was assisting the patient in the healing process without any further support. Accompanying needs can be seen in the quotes below:

*"I also involve the children to accompany my mother while in the hospital. My child is waiting with my mother and my mother feels that there is still someone who cares, so she doesn't feel lonely." (IDI-F 2)*

*"Accompanying patients has reduced this pain percentage. The patient is getting weaker, sometimes he is sad, sometimes he is anxious. If someone accompanies them, it can at least reduce the pain a little bit." (IDI-F 4)*

### Theme 3: Information needs

Information needs based on findings from informants are the need for openness and clarity of information about the disease from HCPs, clarity in questions from PwCUCs and re-energized information. PwCs want clarification of questions arising from the disease and its treatment process from HCPs or volunteers. One of the PwCUC informants stated that:

*"Many question that need to be clarified. It (cancer) is no ordinary disease, so many questions from me, it is so important." (IDI-P 2)*

Moreover, information about treatment delivered by informants is an essential requirement for PwCUCs. Informants, in detail, stated that they needed information about problems after chemotherapy, mental treatment and cancer treatment. One informant stated that:

*"From my mother's stories, there are still many cancer people who don't know about cancer, such as the treatment and how to treat it, how it is, and information about mental treatment as well." (FGD-F 2)*

Then, information about the medication process was stated by the informants as information needs from PwCs. Informants revealed administration process and document preparation is an essential requirement for PwCs. The informant said:

*"Sometimes at the first, it we do not know, like in this hospital, what we should do?" (IDI-F 3)*

Another information needed by PwCs undergoing chemotherapy is re-energize information. Informants mentioned that sometimes PwCs and their families experience bad conditions due to cancer and the

chemotherapy process. Thus, re-energized information needs to be provided by HCPs or volunteers to patients and families to strengthen their psychological state. An informant stated that:

*"Most people, if someone suffers from cancer, they immediately, that is, it was a drop. So they need information on how to re-energize patients and families." (IDI-H 3)*

### Theme 4. Healthcare services support

Based on the informants' subjective experience, healthcare services support is a PwCUC requirement that must be met in the chemotherapy process. The desired support is support from medical equipment and HCPs. Support from medical equipment includes the completeness of medical equipment in the chemotherapy process, both in the hospital and in the community (at home or at PHC). One informant said:

*"I hope that there is more complete medical device, sir. Not only in this hospital but also in other hospitals in Jember." (IDI-P 4)*

Healthcare provider support was also widely disclosed by informants. The support needed is how the nurse or doctor treats PwCUCs. Informants mentioned that good communication and a professional HCP is a form of HCP support. Informants revealed that good communication in HCPs should be better. One informant said:

*"Communication from nurses also needs to be better to support us. Sometimes I don't understand what the doctor is saying about my condition. Nurses should help us to translate the doctor's language so that it is more understandable." (IDI-P 5)*

Then, informants revealed that HCPs should also be professional in caring for PwCUCs and their family. Informants mentioned that nurses should be thoughtful in carrying out their caring activities. Informants stated that PwCUCs mostly had high sensitivity due to their illness. Furthermore, PwCUCs also need special attention from HCPs. Informants think that PwCUCs have different conditions from people with other diseases. Some informants expressed:

*"Nurses should be more thoughtful, sir. They have to be more patient in dealing with cancer patients because cancer patients are really sensitive." (IDI-P 6)*

*"Cancer patients should get special attention from HCP for these rather severe diseases, such as cancer. I personally think the patient should be considered as a relative by the HCP." (FGD-F 1)*

*“Cancer patients are really different from patients with cases like the usual internal medicine. It’s very different.” (IDI-H 8)*

## Discussions

This study revealed four themes: social support needs, accompanying needs, information needs, and health care service support. The first theme revealed was social support needs. Environmental, peer, and family support are social support needs conveyed by informants. This theme is similar to social, spiritual and emotional in Webb's framework. Moreover, in Boyes' framework, social support needs are similar to patient care and support, although the emphasis on each domain is slightly different. In this study context, environment, peer and family support are part of social support needs. Peer support is the need for cancer patients to get information, strengthen their emotions and empower themselves (Ziegler et al., 2022). Family or caregiver is also a component of the social aspect of cancer patients as their support system. A qualitative study from Mazhari and Khoshnood (2021) in Iran states that one of the needs of cancer patients is the need for sympathetic and knowledgeable caregivers. Next, environmental support is also needed by cancer patients. The environmental aspect is part of the social support for cancer patients. In their scoping review, Lehto et al. (2021) found environmental aspects, especially the natural environment, play a role in improving the psychological status of cancer patients and their families. However, a more profound research exploration in environmental needs aspect in PwCUCs is needed.

Second theme revealed was accompanying needs. Informants argued that accompanying needs are the needs for PwCUCs to be accompanied by family, peers, or significant others, such as volunteers. This theme is not explicitly seen in the domains presented in previous conceptual frameworks, either Boyes et al. (2009) or Webb et al. (2021). However, if this theme is analyzed from its context and essence, accompanying needs are part of the sexual needs of cancer patients. The stressing point of this equation is the intimacy of cancer patients' partners, children, or close friends. The results of quantitative research by Hawkins et al. (2009) in Australia stated that there was a decrease in intimacy, which is part of sexual needs, in cancer patients. Wang (2022) added that countries in the Asian region still have barriers to conveying and expressing those related to their sexual needs. It is one of the reasons intimacy in this context appears as accompanying needs, not sexual

needs. Furthermore, chemotherapy treatment is a long-term treatment for cancer patients, requiring PwCUCs to rely on close friends or family for support during their treatment.

Third theme revealed was information needs: openness and clarity of information about the disease from HCPs, clarity in questions from PwCUCs and re-energized information are information needs argued by informants. Information needs are similar with Webb or Boyes' frameworks. However, in the previous frameworks, the informational need is not the primary need for cancer patients. Webb et al. (2021) Webb revealed that informational needs are part of work-related illness and argued that information needs are related to cancer treatment support. Khoshnood et al. (2019) also found that cancer patients in Iran needed information about cancer diagnosis and treatment. In this study, the information needs found were beyond that. Informants wanted information not only related to treatment and disease but also about how to come to terms with the condition and how the cancer patient could recover from the side effects of his chemotherapy.

Fourth theme revealed was healthcare services support. For the healthcare service system, the Webb or Boyes' framework focuses on the HCP's ability to treat patients related to how the HCP provides services and treats patients. Mazhari and Khoshnood (2021) found that healthcare equipment is also a need expressed by PwCUC. However, this research was conducted in a rural area, so access to services for cancer patients is still limited. In contrast, the previous studies were done in the cancer centre in urban areas with complete equipment and an optimal health support system.

Supportive care is a concept developed by nursing scholars in 1994. Fitch created a framework related to specific supportive care for cancer patients. This framework aimed to assist nurses in preparing care planning for cancer patients with a holistic and multidisciplinary approach (Fitch, 2008). This framework also explains that supportive care should be patient-centered because the needs of cancer patients vary. Therefore, a study with a subjective approach is needed to explore the needs of cancer patients. The theme in this study can serve as a basis for helping nurses in the hospital and the community to develop nursing care plans for PwCUCs based on Fitch's framework.

The qualitative approach is one of the strengths of this study. It can provide in-depth results on the support and care needs of PwCUCs. Also, this study involves various perspectives to provide comprehensive results. Furthermore, the research used multi-method to

triangulate data and enrich research results. Subjective view, besides having strengths, also has weaknesses in seeing phenomena or social problems. This view allows the resulting theme to be influenced by the author. However, we used bracketing techniques and member-checking with another author to minimize subjectivity. Moreover, in limitations, we were not quite sure whether our findings were generalizable to the greater PwCUC population because we only interviewed a small percentage of informants.

## Conclusions

This qualitative study gives insight into the supportive care needs of people with cancer undergoing chemotherapy. PwCUCs need not only individual support but also social support and support from healthcare services in dealing with their condition. Healthcare services support has an essential role that needs to be addressed. PwCUCs have to be investigated more in terms of healthcare services support and its relationship to the health system to improve PwCUCs' quality of life. As a result, this study can serve as a foundation for nurses to build supportive care planning for PwCUCs, particularly in community settings involving the healthcare service system.

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## Conflict of Interest

The authors have declared no conflicts of interest.

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