

Original Article



The Conflict between the Beliefs of the Health Care Providers and Family Caregivers in the Use of Traditional Medicine in Pediatric Oncology: An Ethnographic Study

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Abstract

Introduction: Traditional medicine are popular treatments among families of children with cancer. This study was designed to identify the behaviors, beliefs, and values of families and health care providers for the use of traditional medicine in pediatric oncology.

Methods: This study was conducted with a focus on ethnography approach in the oncology department of a pediatric subspecialty hospital in northeastern of Iran from September 2021 to June 2022. A total of 20 key informants were observed and interviewed formally and informally. The Miles and Huberman (1994) approach was used for data analysis.

Results: Finally, two main cultural themes were emerged, including the blame of traditional herbal medicine and the synergy of rituals with modern therapies. Families use traditional medicine based on values passed down from generation to generation, while health care providers make evidence-based decisions.

Conclusion: The results of the present study represent the conflict between health care providers and families in the use of medicinal herbs. The findings allow care providers to be aware of the beliefs and values of children caregivers to make the right decision about traditional medicine use.

Introduction

The global incidence of cancer is increasing among children.¹ Receiving multiple treatments for cancer in children has several side effects, therefore families use traditional medicine treatments to reduce side effects and sometimes to complete the treatment.²

The World Health Organization (WHO) defines traditional medicine as the use of indigenous beliefs and experiences of different cultures to prevent, diagnose, or treat physical and mental disease which may not be explicable.³

Following the introduction of the integrative medicine system by the WHO, where traditional and complementary medicine is offered along with modern medicine, the tendency to use traditional medicine increased. Various studies evaluated different approaches of traditional medicine for treatment of diseases such as liver disease,⁴ COVID-19,⁵ diabetes⁶ and inflammatory bowel disease.⁷ Recently, traditional medicine treatments have been considered to control the complications of cancer and help improve cancer patients. Lee et al showed that traditional herbal medicines along with chemotherapy

reduced the risk of death in patients with stomach cancer.⁸ Evidence shows that 87% of adults with cancer⁹ and 6 to 100% of these children with cancer¹⁰ use a method other than routine treatment. In fact, families are more inclined to use non-vitamin supplements such as herbs to reduce symptoms and improve quality of life in cancer patients.^{11,12} The type of treatment used by families is influenced by their culture because culture is inseparable from the individual and is closely related to health and care.¹³ Therefore, differences in culture, geography, ethnicity, religion, and socio-economic factors affect the choice of type, and use of treatments by the health care provider.^{14,15}

Iran, as one of the Asian countries, has a long history of traditional medicine. In 1972, the WHO magazine on Iranian traditional medicine said: "The most famous Iranian scientist is Ali Al Hosein Ibn Sina, whose *Ghanoon* book has been a reference for education in medical schools in Europe and Asia for five hundred years".¹⁶ Traditional medicine is defined by Iranian scientists as a science by which the physician identifies the quality of the human body and its goal is to maintain health when

you are healthy and to achieve it at the time of illness.¹⁷ In the Iranian traditional medicine, the disease first improves with lifestyle modification, especially nutrition, and then the doctor seeks medical treatment. Since the use of traditional medicine has long been popular among Iranian families, they tend to use traditional medicine approaches to treat various physical problems. This increased attention to traditional medicine in Iran expanded with the establishment of traditional medicine schools and training of physicians in this field.¹⁷

Culture has a complex nature,¹⁸ therefore it has been defined to clarify the concept of culture; Spradley considers culture as the acquired knowledge which people use to create behavior or interpret the experience and the values and beliefs of people form the core of culture.¹⁹ Therefore, culture cannot be separated from the individual and has a close and intertwined relationship with health and care which lies in action; it guides people's worldview and decision-making.²⁰ Since the concept of culture is complex, it cannot be studied using quantitative approaches and it is essential to use qualitative approaches which are rich, holistic and useful for revealing complexities.²¹

Considering that the culture of the family and the health care providers directs the behavior and the way of caring for children with cancer; contrary to the expansion of the use of traditional medicine, there are few studies in the field of identifying the values and behaviors of the health care providers and family caregivers of children with cancer in the use of traditional medicine. Therefore, more studies are needed in this field. The present study was performed aimed to identify values of the health care providers and family caregivers of children with cancer in the use of traditional medicine.

Materials and Methods

Ethnography is a research method which studies human culture.²² In this method, the researcher tries to understand the meaning of the behavior and discover the values and beliefs of the group by observing their behaviors.¹⁹ A focused ethnographic approach was used in this study; this type of ethnography is designed based on a completely specific and predetermined research question related to traditional medicine and the researcher investigates cultural factors in a limited area.²³ The goal is not to understand people's culture in all its dimensions in general; rather, the questions are related to the description of experiences on using traditional medicine in children with cancer.²⁴

This study was conducted as part of a larger study entitled "explaining the culture of palliative care in the pediatric oncology ward". The present study was performed with a focused ethnographic approach in 2021-2022. The research setting was pediatric oncology world which is one of the pediatric subspecialty hospitals in northeastern, Iran. There are 35 active beds in this ward where children < 18 years are admitted for cancer

treatment and its complications. In each shift, one resident, six oncology nurses, and one assistant nurse are responsible for treating and caring of children. Also, a family caregiver (mainly the child's mother) is always present with the child. It should be noted that the use of traditional medicine for caring children with cancer has not been formally defined in this section.

Key informants are a source of information for the ethnographer, and the ethnographer describes the culture through the language of key informants.²⁵ Key informants have special knowledge or position, they are willing to share their knowledge with the researcher.²⁶ Twenty key informants, including 13 child care providers, 4 nurses, and 3 physicians were observed and interviewed formally and informally.

The first author as a participant observer attended the pediatric oncology department. Since she previously worked as a clinical nurse in this department, the trust building process was accelerated. Therefore, in order to collect data, while participating in the activities of the department, such as vascular access, injection of chemotherapy drugs and other activities of the department for 9 months from September 2021 to June 2022, she also observed the behaviors of child caregivers and health care providers. A total of 200 hours of observation was made in different morning, evening and night shifts and on all days of the week. During the researcher's presence in the department, to prevent interruptions in the patient's care, the researcher performed the care activities in coordination and under the supervision of the responsible nurse and with the patient's consent.

At the beginning of entering the research setting, descriptive observations were made to identify the main characteristics of the research setting such as the people presence and their activities. Then, the observations were more focused to identify the behaviors of the treatment staffs and the child's family caregiver and their values in using traditional medicine. The observations at this stage were to answer the structural question,²² "what traditional treatments the family or health care providers use for the child and what are their beliefs about the use of traditional medicine?". The researcher then made selective observations to identify the differences between the subthemes within each theme and to help differentiate them. For example, the answer to the question "what is the difference between mothers who use traditional medicine and those who do not?" and what is the difference between nurses/doctors who are in favor of using traditional medicine and those who are against using traditional medicine?

The first author recorded short notes while observing and expanded as soon as possible. Then, in line with the observations and for clarifying the ideas, values and beliefs, she collected data through Semi-structured interviews and informal interviews.

In the case of raising a question for the first author during

the observations, she would ask the participants in an informal interview. Informal interviews were conducted at the patient's bedside, work room and nursing station. If further exploration in the data was needed, the researcher selected the participants for the semi-structured interview using a purposeful sampling method with maximum variation. Participants should be willing to participate in the study and have rich knowledge and experience in caring for children with cancer.

For the formal interview, first the purpose of the research and the necessity of audio recording were explained to the participants, then informed consent was obtained. They were assured about the confidentiality of the interviews and that the non-agreement of the mothers to participate in the study would not interfere with the process of caring for their children. The place and time of the interview was determined based on the participants' opinions. The place of the interview was often a room which was used as a ward school. The mean duration of semi-structured interviews was 45 minutes.

The questions asked to the child's caregivers in the formal interview were: "what traditional medicine do you use for your child?", "what do you believe about using traditional medicine for your cancer child?", "what is your attitude towards using traditional medicine for your cancer child?", and "what attitude do you have for not using traditional medicine for your cancer child?". The health care providers were also asked these questions: "what traditional treatments do you use for children with cancer?", "What treatments of traditional medicine do you recommend to children with cancer and their families?", "What is your point of view about encourage families to use or prevent traditional medicine?", "What is your opinion about using traditional medicine to treat children with cancer?", and "What experience do you have in using traditional medicine for children?". Observations and interviews continued until saturation of data. In ethnographic studies, saturation is achieved when the collected data is repeated and confirmed.²⁵ In fact, when the researcher finds out that the research questions have been answered, he can consider it as saturation and field leave.

Regarding to the previous presence of the first author as a clinical nurse in this department, to identify her values, expectations about traditional medicine in the pediatric oncology department, the researcher was interviewed by a professional qualitative interviewer (the second author who specializes in ethnography) before entering the research setting. The audio file of this interview was implemented and the concepts derived from the researcher's beliefs were considered in all stages of data collection and analysis. Also, during the process of fieldwork and data collection, the researcher repeatedly recorded her feelings and opinions in the form of a journal note to facilitate the process of reflexivity during ethnography. Therefore, the concepts in reflection were taken into consideration by

the researcher in all stages of data collection and analysis.

Data management and analysis were performed using the Miles & Huberman approach.²⁷ Data analysis began with an inductive approach at the same time as collecting data. For this purpose, after each fieldwork, the obtained data from informal or semi-structured interviews and observations was converted into text and while preparing a summary of the data and initial analysis along with a few questions for the next observations, it was recorded in the contact summary sheet. Since in qualitative analysis, the goal is to interpret the findings at a higher level than the initial formulation⁵ and you should immerse in the data, therefore observations and interviews were read several times after transcription. After general understanding of the data, the field notes collected from observations and interviews were coded in MAXQDA software, which resulted in descriptive codes. Then, common quotes about a concept are placed next to each other by in-case analysis and form pattern codes that are more inferential and have high repetition. In the next step, cultural themes were identified by cross-case analysis, which is a review of pattern codes and identification of similarities and connections between the variables.

The researcher collected data after receiving permission from the ethics committee of Mashhad University of Medical Sciences and presenting a letter of introduction to the officials of the research setting. It should be noted that the place of the interview was determined by the participant's opinion. Before interviewing the participants, the objectives of the research and their voluntary participation and voice recording were explained and they were asked to sign the informed consent form. Participants were assured that their information would remain confidential and that their non-participation would not interfere with their child's care.

To ensure the trustworthiness of the findings, the four criteria of Lincoln and Guba was used; credibility, dependability, conformability, and transferability.²⁸ The validity of the study was guaranteed by long-term presence of the researcher in the research setting, and using triangulation in data collection, including observation, formal and informal interviews, and document review. The first author researcher increased the validity of the study by repeatedly reading the field notes before analysis and immersing in the data. Dependability of the study was presented by providing details of the research process, the researcher's entry into the field, trust building, data collection and analysis. Data coding and analysis were evaluated by members of the research team who are experts in qualitative research. Some of the interviews were shared with the participants along with the codes to ensure the researcher's inferences from the interviews. Confirm ability of the study was ensured by reflective writing of the researcher, so that during the fieldwork, the researcher recorded potential assumptions and biases in data collection and analysis, and all the records were

transcribed. As a doctoral student, the researcher collected and analyzed data under the supervision of a professional qualitative research team, especially in the ethnographic method. Transferability was achieved by taking into account maximum diversity in participants. On the other hand, the participant selection process was available for the reader to assess the transferability of the study.

Results

The characteristics of the participants in this study were presented in Tables 1 and 2. Based on data analysis, 1250 initial codes, seven model codes and finally two cultural themes including blame of traditional herbal medicine and synergy of rituals with modern therapies were extracted (Table 3).

Theme 1: Blame of Traditional Herbal Medicine

The first cultural theme is the blame of traditional herbal medicine, which emerged from the pattern codes of citing scientific articles, controlling infections, scientific superiority of physicians, and mocking traditional medicine. In fact, this category shows the negative attitude of the health care providers towards herbal medicine and their opposition with the use of these treatments by caregivers. Doctors and nurses believed that the necessity of using traditional medicine by caregivers is subject to valid scientific articles and stated that these treatments were acceptable if there was scientific and documented evidence.

One of the physicians said in this regard: *“We have a medicinal plant and an herbal medicine. An herbal medicine which has been processed by a specialist in this field and has become a medicine and a documented article has been published will be acceptable.”* (Physician 2)

A nurse states her experience in this regard: *“I only recommend something to mothers that is scientifically validated and I’m sure about it. For example, there was a mouthwash for mucositis made from honey that its clinical trial was performed in our ward. That drug, as I saw it, was effective and had no side effects, I say it is good”* (Nurse 3)

In fact, the health care providers accept the use of traditional medicine under the supervision of a

Table 2. Characteristics of medical personnel participating in the study

Code	Role	Age	Gender	Job experience in hospital (year)
Health care provide 1	Physician 1	53	Female	18
Health care provide 2	Physician 2	50	Male	16
Health care provide 3	Physician 3	48	Male	15
Health care provide 4	Nurse 1	27	Female	5
Health care provide 5	Nurse 2	30	Female	8
Health care provide 6	Nurse 3	37	Female	12
Health care provide 7	Nurse 4	32	Female	8
Health care provide 8	Nurse 5	25	Female	2

Table 3. Pattern codes and cultural themes extracted from the results

Cultural themes	Pattern codes
	Citation of scientific articles
Blame of traditional herbal medicine	Fear of side effects
	Scientific excellence of physicians
	Ridicule of traditional medicine
Synergy of rituals with modern therapies	Medicinal plants use
	Diet modification
	Healing massage

traditional medicine doctor; Nurse: *“I always tell them that if you want to get these traditional treatments, you have to get help from someone who has a university degree, now that there is a school of traditional medicine, to get help from them.”* (Nurse 1)

One of the most important problems for children in the oncology ward is a decrease in blood cells following chemotherapy, which increases the duration of hospitalization. The fear of side effects reflects the belief of the health care providers that the unprincipled use of herbal medicine will lead to aggravation of the complications such as infections in children.

The nurse says in her experience: *“For example, we had a patient with neutropenia. Well, the infection is very important in these cases. The patient referred to traditional healers and they give him some plants in a dirty capsule. Not only he is not feeling well, his condition is getting worse.”* (Nurse 5)

One of the doctors said in this regard: *“These plants that mothers give to children are desert grasses with soil*

Table 1. Characteristics of family caregivers of the child participating in the study

Code	Age	Child diagnosis	Duration of child diagnosis	level of education	Place of living
Family caregivers 1	35	All	1 year	Elementary	City
Family caregivers 2	45	All	6 months	Diploma	village
Family caregivers 3	32	Brain Tumor	9 months	Master's degree	City
Family caregivers 4	31	All	One year and 6 months	Diploma	City
Family caregivers 5	28	All	One year and 3 months	Bachelor's degree	city
Family caregivers 6	36	Brain tumor	2 years	Bachelor's degree	city
Family caregivers 7	21	All	8 months	Student	City
Family caregivers 8	42	Neuroblastoma	2 years and 6 months	Elementary	Village

and not washed, it only adds to the infection.... They have no effect other than adding a new problem to the child..." (Doctor 1)

It seems that the lack of familiarity of traditional medicine with cancer may threaten the life of children; *"We had a client who had referred to traditional medicine, traditional healer had recommended cupping for the treatment of blood diseases such as cancer.... He had done... bringing the child to the hospital with his whole body bruised."* (Nurse 1)

Scientific superiority of physicians: Field observations showed that nurses seek the oncologist's approval for the use of traditional medicine and considered its use subject to the opinion of a specialist physician.

One of the nurses said: *"Mothers ask me a lot, I do not know what to answer, I do not know how they react with chemotherapy drugs.... Something that they ask us many, I finally ask the doctor, I say something, many moms ask, do you think it is good? Does it work? I do not comment."* (Nurse 4)

The concept of ridicule of traditional medicine reflected the efforts of physicians to distance mothers from behaviors and tendencies in the use of herbal remedies which was shown in the form of ridicule and jokes. In fact, doctors tried to ridiculously show the dangers of these treatments to the mothers of children.

Field observations also showed that physicians did not agree with the use of traditional medicine. In one of the observations, *the doctor laughed when he saw glass jars with combination of honey and Nigella sativa and Ginger on the children's tables and said, "Your potion is still on the beds, You all have, Do you still believe in these mixtures?"* (Doctor 1)

One of the doctors said in this regard: *"The herbal medicine these mothers are talking about is not medicine. There is no specific dose and they do not give drugs with a high dose; this is the medicine that mothers have taken from themselves"*. (Doctor 3)

Theme 2: Synergy of Rituals with Modern Therapies

This theme shows the use of different approaches of traditional medicine by the family along with modern therapies.

This theme is extracted from pattern codes of medicinal plants use, diet modification and healing massage. Children admitted to the oncology ward undergo various chemotherapy courses, which have many side effects. Previous successful experience of families in controlling the side effects of chemotherapy with traditional medicine led to their positive attitude towards traditional medicine despite the opposition of the treatment team and they were willing to use these treatments.

During the field observations, containers containing honey, a mixture of honey and crushed Nigella sativa, meat extract (meat water), and crushed Ginger were repeatedly seen on the table next to the children's bed. Mothers of

children with cancer believed that medicinal plants play a synergistic role with common therapeutic approaches and believed it as *"adjunctive therapy, not alternative to chemical drugs"*.

In this regard, *one of the mothers while holding a cylindrical box with the label of "honey propolis to strengthen the immune system" told another mother "I gave him from the beginning of the epidemic COVID-19. Thank God he has no problem so far.... that's right that the cell (GCSF) should be injected, but honey also strengthens the body."* (Mother 8)

Some family caregivers had been trained the courses in the field of medicinal plants, they considered herbal medicines along with conventional treatment to be effective in reducing complications.

In this regard, one of the mothers said: *"Unlike the first courses of chemotherapy, which had a severe drop in platelets, since he ate Medic ago sativa (along with doctor's medication), he no longer has anemia and platelet drop. I went to a class that was about herbal medicines, it was helpful for me. Now others are hospitalized for complications, but we were never hospitalized for complications"*. (Mother 3)

Imitating family elders and following their advice has a great role in encouraging families to use medicinal plants to reduce the side effects of chemotherapy.

In this regard, one of the mothers said: *"This is Trachyspermum, it is very good for platelets. We villagers use this herbal medicine a lot..... it is also available to us,.... our mothers who used a lot of these things were more healthier."* (Mother 5)

Pain is one of the most important concerns of mothers in this area. One of the ways mothers can reduce their children's pain is to use herbs.

The mother of a child who always had a container of honey and Nigella Sativa on the child's bed side says in this regard: *"Experience has shown me that painkillers keep the body warm for a short time and then expelled, which is why it has a temporary effect. But Nigella Sativa has a warm nature. It keeps the body warm and makes it painless. I even had made it for myself"*. (Mother 2)

One of the most important approaches for mothers to achieve child healing is to include the organic and so-called nutritious foods in the child's diet. In this regard, one of the mothers says: *"This chickpea is local; it is natural... chemical fertilizer has not been given to this chickpea and it has grown with rain water... it strengthens the body."* (Mother 4)

Some mothers also considered adjusting the child's diet during chemotherapy in line with the advice of older physicians. *One of the mothers said: "Abu Ali Sina medicine says that blood is made in heat. Now the chemotherapy is hot at the same day and then it burns and the body cools down. So the child should eat warm food to make blood."* (Mother 7)

The researcher during the fieldwork observed many

times that the mothers exchange information about diet in groups. It seems that mothers are influenced by the environment and other mothers' stories of their successful experiences to these treatments.

One of the mothers said in this regard: *"Another child was admitted with the same diagnosis as my child. He had no side effects at all. His mother scolded me that you do not pay attention to the baby's nutrition, she gave me a list of foods that she gives to her baby, for example, she always had mung bean in her baby's diet, she always gave grape juice to the baby on an empty stomach, I suffered from a guilty conscience."* (Mother 6)

One physician had a positive view of including certain foods in the child's diet and modifying the diet to help control the effects of the disease, he said:

"It is true that eating or not eating certain foods is effective in preventing cancer, but has no role in treating it, only with certain foods, such as offal, families can reduce the effects of the disease." (Doctor 2)

Healing massage include the behaviors of mothers and nurses in using manual therapies to improve children's pain. The following field observation is a testament to this claim:

"During one of the observations, the infant was restless when entered the room to implant vascular access. Before the venipuncture, the nurse started massaging the baby's feet from the top of the thigh to the ankle. The baby calmed down and looked at the nurse. The nurse said, "See, mom, massage the baby's body. This way, the baby feels soothing pain. When pain calms down, the child communicates with you." (Nurse 2)

Mothers used a hot water bag or warm handkerchief on the baby's body to relieve the baby's pain. Families also used vegetable oils in massage. They poured oil on their hands and massaged the child's body. In fact, families used heat and oil along with massage to relieve pain sooner and more.

In this regard, one of the mothers said: *"My daughter's pain worsens at night, everyone said take morphine; she cannot sleep at night... I used to massage her hands and feet and warm her. With what I did, she slept that night."* (Mother 1)

Discussion

In the present study, the two main themes of blaming herbal traditions and synergism of rituals with modern treatments show the different views of the health care providers and families in the use of traditional medicine approaches. The results of this study indicate that while traditional medicine is considered synonymous with the use of medicinal plants; the use of these herbal approaches in the treatment of children with cancer is not accepted, but diet modification and massage has been accepted and are also used in child's care and are recommended to families. Families try to manage chemotherapy complications by applying different approaches based

on traditional Iranian medicine. Meanwhile, doctors and nurses do not accept the use of medicinal plants in these children because they believe that these treatments do not have acceptable scientific evidence about the side effects and mechanism of action. Therefore, doctors and nurses try to inform mothers about the adverse effects of these treatments. Nurses also do not decide about the use of herbal remedies and concede it to the doctors. The health care providers and families have same opinion in using other approaches of traditional medicine such as massage, using different oils for massage and including organic and nutritious food in the child's diet.

One of the themes in the present study is the blame of traditional herbal medicine. This category shows the negative attitude of health care providers toward medicinal plants. Doctors and nurses consider the most important reason to oppose these treatments is the limitation of scientific evidence. In fact, the texts also indicate that the most important reason for the lack of support of the health care providers for this treatment is the limitation of evidence.²⁹ The limitation in scientific evidence has caused the fear of drug interaction and the unknown mechanisms of medicinal plants in the health care providers.³⁰ In the study by Balouchi et al the most important obstacle for nurses to use traditional medicine is their lack of information, which is resulted from the lack of reliable sources.³¹ The health care providers declared fungal infections in children with cancer as the main challenge of consuming herbal products, while families declared that herbal products are safe.³² It seems that believing the scientific superiority of physicians, which is due to medical paternalism in the Iranian health care system² is also seen in commenting on the use or non-use of traditional medicine. As Velloso and Ceci believed, the decision of health care providers to use therapies is influenced by medical paternalism.³³ In the present study also, nurses believed in the superiority of oncologists in making treatment decisions to recommend or not to recommend the use of traditional medicine. Christina et al stated that nurses were pessimistic about using traditional treatments in oncology wards and did not have enough confidence to recommend these treatments.³⁴

The second theme in the present study is the synergy of rituals with modern therapies. This theme represents the use of different approaches of traditional medicine together by mothers; some of them which have scientific evidence are accepted by nurses and doctors. In fact, the most important goal of mothers in this field of research was to control the side effects of chemotherapy using medicinal plants so that the side effects do not prevent the child from continuing the treatment process. Weyl Ben Arush et al also stated that parents do not seek to replace medical treatments with complementary therapies.³⁵ Mothers believe that traditional medicine is harmless and use it for their children.³² Vickers et al stated that mothers try to participate in their child's

treatment process by using traditional medicine.³⁶ The focus of mothers in the present study was on improving the nutrition of the child to strengthen the body to fight cancer, which was also accepted by the health care providers. In fact, this behavior of mothers is in line with the recommendations of traditional medicine. Traditional medicine believes that food, in addition to providing energy, can affect the physiology of the body, and ensure a person's health and illness.³⁷ In the books of Abu Ali Sina and Jorjani, the consumption of natural and nutritious foods is recommended for the prevention and treatment of cancer.³⁸ Traditional beliefs state that blood diseases such as leukemia are actually caused by changes in the balance of blood quality which require the use of herbal medicines,³⁹ it seems that it is the reason for more families to use traditional medicine, especially herbal remedies. During the fieldwork of the present study, it was observed that mothers, as a group or individually, share their information about the effectiveness of traditional medicine with other mothers presented in the ward. In fact, one of the main ways of transmitting information in traditional medicine is oral methods in which information and methods are transmitted from generation to generation.⁴⁰ The texts also show that the main source of information in traditional medicine is friends, relatives and support groups; meanwhile, doctors and nurses are the last source of information for patients in the use of traditional treatments.^{41,42}

The results of the present study showed that nurses used massage which have been proven to be safe in scientific sources in order to reduce pain for children. In the literature, nurses stated that the positive benefits of traditional medicine caused to use non-pharmacological approaches such as massage and aromatherapy in palliative care to reduce pain.⁴³⁻⁴⁵ On the other hand, Ghiasuddin et al found that families frequently use traditional approaches such as healing touch to treat cancer child ;they perform these behaviors based on their culture.⁴⁶ Finally, it can be said that the health care providers and families tend to use traditional medicine treatments based on their culture.⁴⁷ The health care providers try to adjust their culture using scientific resources, but the families use their cultural values as the basis of their practice.

One of the limitations of the present study is the lack of access to families whose children have recovered from cancer or have undergone bone marrow transplantation. Also, the absence of the child's father limited the access to the information of this group. So it is suggested to perform future studies to explore the values and beliefs of families whose children have recovered in the use of traditional medicine.

Conclusion

The findings of the present study helped to discover the culture of using traditional medicine in children with cancer hospitalized in world. In this study, the values and

beliefs of families in the use of herbal traditional medicine are in conflict with the beliefs of the health care providers in the non-scientific use of herbal traditional medicine in these children. Since the results of this study have led to the discovery of hidden components in care, the results can be used to develop educational programs presented in the pediatric oncology department, and nurses and doctors, knowing the values of families, should provide them with effective care. On the other hand, families believe in the effect of diet on the improvement of their child and seek to replace suitable foods for the child. Therefore mothers seek to combine Iranian traditional medicine with conventional medicine in the course of child's treatment, so nurses should clearly educate these mothers about the positive and negative effects of traditional medicine approaches.

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Author's Contributions

Conceptualization: Elahe Ghayebie Motlagh, Nayyereh Davoudi, Mahmoud Bakhshi, Hossein Karimi Moonaghi, Ali Ghasemi.

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Competing Interests

The authors declared no conflict of interest in this study.

Data Accessibility

The datasets are available from the corresponding author on reasonable request.

Research Highlights

What is the current knowledge?

- Culture plays a role in the use of cancer treatment approaches.
- Asian families are more inclined to use traditional medicine.

What is new here?

- Health care providers were reluctant to support the child's family choices for traditional medicine use due to their concerns about the safety of traditional medicine for the child.
- Health care provider recommend evidence based use of traditional medicine.

Ethical Approval

This study was approved by the ethics committee of Mashhad University of Medical Sciences with the code IR.MUMS.NURSE.REC.1400.001

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