The Psychosocial Experiences of Omani Parents of Children and Adolescents Diagnosed with Cancer

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Abstract

Objectives: This study aimed to explore the psychosocial experiences of Omani parents of children and adolescents diagnosed with cancer.

Methods: A phenomenological qualitative study was conducted from December 2022 to June 2023 among 20 Omani parents of children and adolescents with cancer at the referral oncology and hematology centers in Oman. Semi-structured interviews were used to collect data. Parents experienced a range of emotional responses, including trauma, shock, denial, sorrow, and uncertainty, along with ongoing worry and fear for their children's well-being, potential treatment side-effects, and risk of disease relapse. The framework analysis using NVivo-14 was employed to analyze the qualitative data.

Results: The study identified three main themes: (1) Emotional and mental impact of the confirmed cancer diagnosis; (2) Living with the child's cancer diagnosis, and (3) Cultural aspects of cancer. Omani parents experienced a range of emotional responses, including trauma, shock, denial, sorrow, and uncertainty, along with ongoing worry and fear for their children's well-being. The study highlighted a significant change in the parents' lives following their children's cancer diagnoses, affecting the entire family's usual dynamics. Nonetheless, the parents adopted diverse coping mechanisms to overcome the challenges encountered throughout their child's illness. The study emphasizes the influence of prevailing cultural and religious beliefs on various aspects such as disease causation, treatment modalities, coping mechanisms, and the use of terminology related to illness.

Conclusions: The findings of this study reveal that Omani parents of children and adolescents diagnosed with cancer experience a long and challenging journey with significant psychological, social, and financial impacts. Therefore, collaborative efforts among healthcare systems, policymakers, and community stakeholders are needed to enhance the quality of care and psychosocial support for Omani parents.

Keywords: Parents; Children; Adolescents; Cancer; Experience, Oman.

Introduction

While cancer in childhood and adolescence is relatively rare, it still imposes a considerable burden worldwide.[1,2] Annually, approximately 429,900 individuals under 19 years of age are diagnosed with cancer globally, with age-standardized incidence rates of 141 and 185 cases per million person-years in children and adolescents, respectively.[3,4] In Arab countries, over 18,000 children below the age of 15 years are diagnosed with cancer every year, with annual incidence rates ranging from 7.5 to 12.8 cases per 100,000 children. Approximately 7,000 children with cancer die every year, with a mortality incidence ratio of 0.38.[5]

Beyond its nature as a physical ailment, cancer is recognized as a condition with various physical, psychological, psychosocial, and economic challenges.[6-8] Both a cancer diagnosis and its subsequent treatment can cause considerable emotional and psychological distress,[9-11] impacting both children and adolescents with cancer as well as their parents. Thus, the onset of cancer in childhood and adolescence represents an enormous emotional and mental crisis for both the afflicted individual and their entire family, particularly the parents who often assume the primary caregiving role.[12-17] Receiving a cancer diagnosis is a profoundly traumatic experience for both the patient and their parents, impacting many aspects of their lives.[7,18] From the moment of diagnosis, the entire family is thrust into a confusing and threatening new reality.[19] A sudden cancer diagnosis in a child profoundly alters normal family dynamics, necessitating adaptation to the child's illness.[20] Coping with a life-threatening illness is very hard for children, and their families.[4] Therefore, the availability of psychosocial services within pediatric oncology departments is crucial to address the psychosocial needs of families during the cancer journey.[21] Indeed, pooled prevalence rates of anxiety, depression, and Post Traumatic Stress Disorder (PTSD) among parents of children with cancer are 21%, 28%, and 26%, respectively.[22] Qualitative studies have also consistently reported a spectrum of emotional responses among the parents of children and adolescents with cancer, including shock, uncertainty, denial, sadness, confusion, worry, disbelief, grief, and fear, particularly among mothers.[8,18,23-28] A prior study conducted in Oman examining the lived experiences of mothers raising children with leukemia revealed that the emotional impact of the diagnosis was not confined to a singular moment, but persisted over an extended period with varying intensities and diverse emotional expressions.[23] Other qualitative studies conducted in Turkey, Jordan, and Singapore similarly document the range of emotions experienced by mothers upon learning of their child's cancer diagnosis, which often include denial and disbelief.[18,23-25]

In the Sultanate of Oman, a country in the Middle East, the incidence of cancer has increased dramatically in recent years. In 2020, a total of 2,198 patients were diagnosed with cancer, with 1,994 patients (90.76%) being of Omani nationality and 125 (6.3%) comprising children aged 0 to 14 years.[29] Future projections indicate that the overall incidence rate of new cancer diagnoses in Oman will increase to 5,761 by 2030 and 8,549 by 2040.[30] Consequently, proportional increases in childhood cancer are expected, especially considering that approximately 31% of the current population is under 19 years of age.[31] As Oman continues to make significant improvements in healthcare delivery and medical treatment, cancer survival rates among children and adolescents have improved. However, the psychosocial toll of a cancer diagnosis should not be underestimated. Understanding these psychosocial repercussions is crucial as an essential indicator of patients' and their parents' well-being to ensure comprehensive oncological care.[32] This study explored the psychosocial experiences of Omani parents of children and adolescents diagnosed with cancer.

Methods

A phenomenological qualitative study was conducted among Omani parents of children and adolescents diagnosed with cancer recruited from the National Oncology Centre (NOC) of the Royal Hospital and University Medical City- National Hematology and Bone Marrow Transplant Center between December 2022 and June 2023, in Muscat, the capital city of Oman. These centers serve as the main referral cancer centers providing integrated care for cancer patients throughout the country.

A purposive sampling approach was used to ensure a diverse range of parents were interviewed, including parents of various ages, marital statuses, health statuses, education levels, employment statuses, family incomes, and total number of children in the family. Moreover, the children and adolescents also varied in terms of age, gender, time since diagnosis, and type of cancer. Parents who met the inclusion criteria: (1) Omani nationality and (2) their child diagnosed with cancer aged 6–18 years old were selected for recruitment. The eligible parents accompanying their children were informed about the study and were invited to participate. A total of 20 parents were interviewed, comprising 17 parents recruited from the NOC and three from the National Hematology and Bone Marrow Transplant Center. Data collection continued until saturation was achieved and no new themes emerged during the initial analysis. At this point, participant recruitment halted, as the 20 selected parents were deemed sufficient for the study.

A semi-structured interview guide has been used as a tool for data collection for this study. The interview guide contained eight open-ended questions, with probing methods used as needed, and it was developed based on the study objectives and the literature review. Demographic information was collected at the end of the interview. Participant-led interviews were conducted, with the researcher following up on topics the participants introduced, enabling the participants to better express their experiences, resulting in richer data. The interviews were audio-recorded with the participants' permission to avoid errors and interference. All interviews were conducted in Arabic and ranged between 27 and 75 minutes, averaging 43 minutes. The interview recordings were stored securely on a password-protected computer, accessible only to researchers directly involved in data analysis. Confidentiality was maintained by assigning pseudonyms to participants, and all personal identifiers were removed from the transcripts. Additionally, the audio files were deleted from the device after transcription to minimize the risk of unauthorized access. The participants were informed that their data would remain confidential and anonymized and that the researchers would maintain research integrity and honesty, ensuring that the informants' personal information was not disclosed.

The audio recordings of the interviews were subsequently translated into English by an Omani translator who is an expert in English translation and transcribed verbatim. To enhance the quality and reliability of the translation, the English transcripts were reviewed by two Omani bilingual independent authors who are experienced in qualitative research and have cross-checked the manuscripts against the original audio recordings to make sure all nuances of participants' experiences are captured during the translation process. This study's first data analysis step was a framework analysis of the richest transcripts. Following this, two researchers applied Colaizzi's (1978) phenomenological methodology to the remaining interviews.[33] The data analysis followed seven steps. First, interviews were transcribed and thoroughly reviewed. Then, significant statements relevant to the study objectives were extracted. Next, these statements were analyzed, clustered into themes, and repeated across all participants. The themes were then integrated into a comprehensive description of the parents' experiences through coding. This description was refined into concise statements. Finally, two researchers independently validated the analysis, resolving any discrepancies through discussion. The transcripts were imported into NVivo-14 for data coding and management. Findings were discussed with the research team to reach a consensus on the final themes and sub-themes.

Ethical approval to recruit participants was obtained from the Scientific Research Committee of the Royal Hospital (SRC#92/2021), and the Medical Research Ethics Committee of the College of Medicine & Health Sciences, Sultan Qaboos University (MREC #2605).

Result

A total of 20 participants were included in this study. The average age of the participants was 37.9 years (range: 30 to 49 years). Most participants were mothers (n = 16; 80%) and were recruited from the NOC (n = 17; 85%). Most participants were married (n = 19; 95%) and had four children or fewer (n = 14; 70%). Most participants did not suffer from chronic diseases (n = 17; 85%). Half of the parents were employed, and most were educated to the high school level or above (n = 17; 85%). Most reported a monthly family income of less than 600 OMR (1,560 US$) (n = 11; 55%). Half of the parents were residents of Al Batinah North Governorate (n =10; 50%). Regarding the characteristics of the children diagnosed with cancer, the average age was 9.55 years (range: 6.0 to 16.0 years). There were more male (n = 11; 55%) than female (n = 9; 45%) children. Children with hematological malignancies, including leukemia and lymphoma (n = 12; 60%), outnumbered those with solid tumors (n = 8; 40%). At the time of the interview, the majority of the amount of time that had elapsed since their cancer diagnosis was less than six months [Table 1].

Table 1: Demographic characteristics of participants (N = 20).

Characteristics	**n (%)**
Age (years)	37.9 (range: 30-49)
Child's age (year)	9.55 (range: 6-16)
Gender	
Female	9 (45)
Male	11 (55)
Relative	
Mother	16 (80)
Father	4 (20)
Marital status	
Married	19 (95)
Widowed	1 (5)
Current health status	
Yes	3 (15)
No	17 (85)
Educational level	
Not educated	1 (5)
Primary school	2 (10)
General diploma	9 (45)
University degree	8 (40)
Number of children in the family	
≤ 4	14 (70)
> 4	7 (30)
Employment status	
Employed	10 (50)
Unemployed	10 (50)
Child's diagnosis	
hematological malignancies (leukemia and lymphoma)	12 (60)
Solid tumors (Osteosarcoma, Choriocarcinoma, Rhabdomyosarcoma, Neuroblastoma, LCH, Brain tumor)	8 (40)
Time since the child's diagnosis, months	
< 6	13 (65)
6-12	2 (10)
>12	5 (25)
Monthly family income, OMR	
< 300	3 (15)
300 – 600	8 (40)
600-1000	6 (30)
> 1000	3 (15)

LCH: Langerhans Cell Histiocytosis, 1 OMR (Omani Riyal) =2.6 USD.

The data arising from the participants' interviews identified three main themes, each with various sub-themes [Table 2].

Table 2: Main themes and sub-themes emerging from participants' interviews (N = 20).

Main theme	**Sub-theme**
1. Emotional and mental impact of the confirmed cancer diagnosis	**1.1** Immediate and long-term emotional impacts of the diagnosis
2. Living with the child's cancer diagnosis	**2.1** Impact of the diagnosis on the parent's daily life

Main theme	**Sub-theme**
	2.1.1 Change in family roles
	2.1.2 Change in perceptions and priorities
	2.1.3 Social isolation
	2.2 The burden of a cancer diagnosis
	2.2.1 Financial commitments
	2.2.2 Parent’s own health status
	2.3 Coping strategies
	2.3.1 Social support
	2.3.2 Support from health professionals
	2.3.3 Religious and spiritual aspects
	2.3.4 Healing effect of time
	2.3.5 Self-education about cancer
	2.3.6 The child’s tolerance to treatments
3. Cultural aspects of cancer	**3.1** Community beliefs around cancer
	3.2 Cultural nomenclature of cancer

1. Emotional and mental impact of the confirmed diagnosis

Interviews with the Omani parents of children diagnosed with cancer revealed their feelings upon receiving their child’s diagnosis. The parents experienced considerable uncertainty and stress during the period awaiting diagnosis. However, after their child had received a confirmed diagnosis of cancer, they experienced a range of immediate and long-term emotions, some of which were conflicting.

1.1.1. Immediate and long-term impacts of the diagnosis

The revelation of such traumatic news was psychologically devastating, particularly during the first few weeks.

More than half of parents recounted their initial reaction when Healthcare Providers (HCPs) initially confirmed the diagnosis of cancer in their children, with shock emerging as the most prevalent response. Much like mothers, fathers similarly expressed shock upon being informed of their child’s cancer diagnosis. A father described as the following:

> It was a big shock for me; it was strange. That week, I saw everything dark, even if there was a light. I felt that life became unclear to me.

Many participants, particularly mothers, reacted with denial and persistent crying upon learning about the diagnosis. There was a strong desire to believe that there must be a mistake in the diagnosis. It often took several days for the participants to absorb the bad news and process the trauma of the diagnosis, with uncertainty and denial being initial responses. A mother said:

> We didn’t expect this to be the case, and we initially thought it was only a primary diagnosis. What was in our mind was that it might be a faulty diagnosis? I cried when I was told. But deep down, I had faith that this was impossible as he only had a fever.

The majority of parents displayed signs of psychological distress, namely feelings of sadness and uncertainty. Feelings of sadness were often attributed to the life-threatening nature of the child’s disease. However, a few parents, particularly fathers, expressed difficulty describing their emotions and feelings. A father said:

> It was a feeling of a father; my tears fell. It is something that I cannot describe and organize; it is the parents’ feelings... I lived that week in a

> state that I wouldn’t describe as crazy, but it is the absence of consciousness, but I was trying to realize and understand. I had faith.

The majority of mothers reported experiencing constant emotions of worry and fear regarding their sick children following the cancer diagnosis. Most mothers articulated a diverse range of concerns, encompassing the potential loss of their children, the adverse effects of treatment, treatment-related complications, and the possibility of relapse. Such fears sometimes led to sleep disturbances for some mothers, compelling them to intermittently awaken their unwell children to ensure their well-being. Furthermore, their apprehension extended to concerns about other family members or unaffected children potentially falling ill. Many parents, including all fathers and some mothers, reported fixating on the future of their children and the likelihood of their recovery. This tendency toward overthinking often led to diminished concentration, increased distraction, and disrupted sleep patterns:

> I lived in a horror story and was overthinking: I don’t want them to go through this…. I worry that they might experience the same thing. Since she was hospitalized until today, I still feel exhausted and have been overthinking; the minimum effort makes me tired.

Approximately half of the parents disclosed that they hid their emotions and feelings, not only from those in their immediate surroundings but also from their sick children. By concealing their distress, the parents attempted to create a sense of normalcy and reduce stress for their children, helping them accept and adapt to the challenges posed by cancer.

2. Living with the child’s cancer diagnosis

The interviews illuminated profound changes in the parents’ lives following their children’s diagnosis with cancer. The child’s diagnosis impacted the entire family, reshaping their dynamics and daily routines. Despite these challenges, parents utilized diverse coping strategies to navigate their children’s illness. These are further elaborated as below:

2.1. Impact of the diagnosis on the parent’s daily life

2.1.1. Change in family roles

The majority of parents, especially mothers, reported struggling to manage the additional household responsibilities arising from their child’s prolonged medical treatment and its subsequent side-effects. Providing full-time care for the unwell child further intensified these caregiving demands, encompassing tasks such as bathing and maintaining the child’s hygiene. Additionally, mothers recounted challenges in balancing the care needs of the sick child with those of their other healthy children. These changes in dynamics disrupted the family’s previous routines and daily activities. A mother said:

> The home responsibilities became more. When I returned home, my kids missed my baking and cooking, but I couldn’t, and I was exhausted from the hospital. When I return home, I prioritize his needs and follow up on the kids’ studies.

Furthermore, over half of parents, predominantly mothers, revealed how their child’s cancer diagnosis had affected their relationship with their partner. They described positive transformations in their relationship following the child’s diagnosis, highlighting increased closeness, cohesion, cooperation, and mutual support. These improvements were attributed to the shared responsibility of caring for the unwell child and their ongoing support for each other throughout the caregiving journey. A mother said:

> My relationship with my husband is excellent; we support each other to keep ourselves strong. His diagnosis made us closer, and we paid attention to things we had forgotten about.

2.1.2. Change in perceptions and priorities

Several parents noted a shift in their perceptions and priorities after their children were diagnosed with cancer. They stated that they now prioritize their children's health above all else, demonstrating their readiness to make necessary sacrifices to ensure their child's recovery and well-being:

> I became someone else. What matters to me is to see my kids healthy. I used to be normal, not bothered about anything. What I wished was to have a house and a happy family. But now all I want is to see them in good health. I became less materialistic.

2.1.3. Social isolation

The majority of parents deliberately isolated themselves socially due to concerns about the child's immunity and susceptibility to infection. This included refraining from attending social gatherings, discouraging visitors, limiting phone usage, and not responding to calls and messages. A mother said:

> I clarified that I did not want any visitors. I do not like to see anybody. I was disconnected from everyone around me. I reply to the messages I get from time to time without giving them details about her. I could not expose her or let her socialize with others. I argue that her immunity is low.

Additionally, some parents were advised not to disclose their child's illness to others due to the added emotional and social burden, including daily messages of support and unwanted advice. They were concerned about potential harm to their child if others knew about the illness. A mother expressed as the following:

> They told me not to tell anyone about his disease, which is between us. This was because of the pressure associated with it; they would send messages daily. We are already under pressure and don't want to receive daily messages from people. Also, they will suggest giving him something we don't want. Also, you don't know who might benefit or harm you.

2.2. The burden of a cancer diagnosis

The interviews highlighted the multifaceted challenges faced by the parents of children with cancer. They were perceived as a burden to parents as discussed below:

2.2.1. Financial commitments

Despite the availability of free cancer treatment provided by the Omani Government, roughly half of the parents highlighted significant financial challenges associated with caring for a child diagnosed with cancer. These difficulties stemmed from various factors, such as extended periods of hospitalization, frequent medical appointments, and the considerable travel distances to specialized hematology and oncology centers. Furthermore, several parents indicated that they were compelled to take time off from their jobs to care for their children, further straining their financial situations. A mother said:

> I work in the private sector, and I have no choice other than to take a leave, and they deduct around half of my salary. It is difficult for me because I have a loan. Our financial state was affected.

2.2.2. Parent’s own health status

Over half of the participants reported a decline in their own health after their child’s cancer diagnosis. Some mothers, particularly those suffering from chronic illnesses, admitted neglecting their health by missing medical appointments and failing to adhere to prescribed medication regimens. Other mothers mentioned reported disruptions in their menstrual cycles and decreased appetite due to the psychological stress stemming from their child’s diagnosis, which persisted throughout various phases of treatment and associated complications:

> His diagnosis put an extra load on me. The pimples and the freckles happened after his diagnosis. I had a disturbance in the menstrual cycle; I get it twice a month and feel psychologically tired. I lost my appetite and felt that I could not eat sometimes. I lost weight significantly, and I weigh 50 kg.

2.3. Coping strategies

The parents described employing a range of coping mechanisms to navigate the challenges they encountered throughout their child’s illness. These strategies encompassed seeking social support, drawing strength from the guidance and support provided by HCPs, finding solace in spiritual and religious beliefs and practices, and deriving insights from the experiences of other cancer patients. Additionally, they highlighted the importance of the passage of time as an essential factor in facilitating their adaptation and resilience amidst these challenges.

2.3.1. Social support

All of the participants highlighted the importance of social support as a key coping mechanism during their child’s cancer journey. This support network included assistance from partners, family members, relatives, friends, and other parents of cancer patients. A mother said:

> My husband supported and encouraged me, and he told me we could take him abroad if we didn’t find a cure. He supported me in everything as if we were the same person.

Furthermore, most parents acknowledged the vital support they received from family members and relatives, including various forms of assistance such as communication, caring for the child’s siblings during hospital stays, and providing psychological, spiritual, and religious aid including financial support which further assisted them in navigating the burdens associated with their child’s illness.

Additionally, several mothers highlighted the crucial social support they received from friends. They mentioned that their friends were willing to assist the family when the mother was absent due to her commitments to the sick child. Furthermore, approximately half of parents mentioned the psychological comfort and strength they gained from support groups in the hospital which consisted of other parents with a child diagnosed with cancer. Learning about other children or cases of cancer, especially their recovery journeys. Such narratives instilled hope and optimism, reinforcing their belief in the possibility of their own child’s recovery.

> When you see someone else’s affliction, it makes it easy for you. When I started to see the other cases of the kids, I was comfortable because

> her case was much better than many kids. Seeing the other patients having similar cases eased it for me.

2.3.2. Support from health professionals

Almost all of the parents described the support they received from HCPs (nurses and physicians) throughout their child's cancer journey. This support spanned both medical and psychological domains, including consistent communication, simplification of information concerning the child's condition, addressing parental inquiries, and providing clarification. Moreover, they offered guidance and assurance regarding the availability of treatment. This further solidified the bond between parents and medical staff. A mother said:

> I'm never complaining about the medical staff; they are very collaborative. I see them as sisters and caring for my son as if he were their child.

2.3.3. Religious and spiritual aspects

All participants involved in this study were Muslims and relied on Islamic rituals to cope with their child's illness. Their religious beliefs allowed them to employ positive reframing as a coping mechanism, attributing the disease as a trial from Allah (God), and allowed them to find solace in prayer, reading and reciting verses from the Quran, and making voluntary charitable donations. Their faith in Allah's has facilitated a deeper spiritual connection and fortified their faith, imbuing them with comfort, reassurance, and hope. A mother expressed the following:

> I believe Allah will not disappoint me. Allah afflicted the prophets and the good people, and we pray to Allah that we are categorized from those whom Allah has chosen to be eventually rewarded. My trust in Allah helped me

2.3.4. Healing effect of time

During their journey through their child's illness, some parents experienced the healing effect of time. Although some parents found the initial stages of diagnosis to be particularly challenging, marked by complexity and uncertainty, they gradually acclimated to the situation. Over time, they developed coping mechanisms, which became more effective as they witnessed positive treatment outcomes, illustrating the healing impact that time can have. A mother said:

> Initially, it was difficult, but now it has become more accessible, especially since I started to see the results. Over time, the situation began to stabilize, and this is a blessing from Allah.

2.3.5. Self-education about cancer

Some participants acknowledged their lack of prior knowledge about cancer before their child's diagnosis. However, to better handle their child's illness, they proactively sought to educate themselves by reading and researching about their child's condition. In some cases, this newfound knowledge proved instrumental in helping the parents navigate and overcome the challenges they encountered. However, others chose to avoid educating themselves about the disease to prevent dwelling on their child's illness further and risk exacerbating their current level of psychological distress. A father expressed:

> I know nothing and didn't want to search about it, because if I do so, I will start to overthink it and psychologically try more than what I was in.

2.3.6. The child's tolerance to treatments

The majority of parents reported that their children tolerated the treatments well, ultimately leading to successful outcomes and a full recovery. As the therapy progressed and associated complications subsided, parents noted a significant improvement in their children's well-being. This positive response to treatment on the part of the child not only benefited the child themselves, but also brought happiness, comfort, and reduced psychological stress to the parents. A mother said:

> My psychological state started to get better when I started seeing her in a better situation. I feel happy and achieved when I see her improving, even if it is a small improvement.

3. Cultural aspects of cancer

This theme presents unique insights derived from interview data concerning community beliefs and cultural responses to childhood cancer among Omani parents encompassing prevalent beliefs about cancer, including perceived causes and treatments. Additionally, nomenclature related to cancer was discussed, highlighting the cultural taboo associated with the word "cancer" itself.

3.1. Community beliefs around cancer

The majority of parents indicated the primary cause attributed to their children's cancer was the "evil eye". One participant expressed her experiences as follows:

> Since she wasn't having symptoms, the medical staff told me that the reasons weren't known yet, making me think that there was something else causing her harm. It might be an evil eye. Such things have been mentioned in the Holy Quran. I suggest she got an evil eye.

However, some parents voiced their disbelief in this notion, despite societal pressure to accept this belief. Instead, they attributed their child's cancer to being an affliction from a higher power, and viewed it as a test of their patience and resilience. They believed Allah (God) had chosen them for this trial to examine their faith and strength in adversity. One participant said:

> Even though everyone approached me to convince me that it was an evil eye, as it is believed in society. They asked me to search for the reason, but I decided not to hear that and put my trust in Allah [God].

In addition, the majority of participants mentioned the treatment of cancer within the context of Omani society, which predominantly relies on spiritual and religious therapies. Living in a Muslim society, most of the parents reported turning to religious practices such as reading the Holy Quran, performing Ruqyah (an Islamic practice in which specific verses from the Quran are recited as a ward against evil or affliction), prayer, and drinking Zamzam water (holy water sourced from Makkah in Saudi Arabia). Additionally, those within their social circle suggested taking the child to a sheikh, a religious scholar able to recite the Quran for healing purposes. One participant expressed:

> I believe in the Quran, Doua [prayer], and Sadaqa (charitable money) are the primary treatments, and they are before the doctors; the doctors are only a cause. I only give him Zamzam water and olive oil if I was

> the one who read on it; other than that, no. I anoint his body with oil and repeat the Quranic verses.

Furthermore, a few participants mentioned cauterization as a possible form of traditional treatment suggested to them by others in the community. However, several parents declined this option to avoid endangering their children, believing it would cause more pain due to its invasive nature compared to other treatment modalities. A father said:

> They have suggested cauterization as it is a common practice in traditional medicine, and I have refused that. I cannot test it on my son.

3.2. Cultural nomenclature of cancer

The majority of participants associated the word "cancer" with fear and death, leading them to avoid using the term and instead opt for euphemisms or medical terminology. This avoidance reflects a deep cultural stigma and emotional distress tied to the disease, with participants describing it as terrifying, fatal, and malevolent. A mother expressed:

> I insist it is a tumor because I do not want to use the word "cancer". Even I do not like to hear the word "cancer". It is always linked to death. It is terrible, malicious, and fierce

Accordingly, many parents had a tendency to avoid utilizing the word directly. Throughout the interview process and when discussing their child's illness, many of them refrained from using the term Saratan (the Arabic word for "cancer"). Instead, they opted for the English terms "cancer" or "waram" (tumor in Arabic), medical terms such as "leukemia" and "sarcoma", or indirect expressions such as "that disease" and "the malignant". A participant said:

> We understand the word "cancer" as a killing disease. We don't even call it "cancer". People refer to it as "the malignant", "the killer", or "that disease", without mentioning the name because it is strong. People are convinced it is a killing disease.

Discussion

This phenomenological qualitative study sought to investigate the psychosocial experiences of Omani parents whose children were diagnosed with cancer.

Consistent with previous qualitative research, this study identified a range of parental emotional responses to the diagnosis of childhood cancer, including shock, denial, sorrow, worry, and fear.[8,18,23-28] They experienced overthinking and the suppression of feelings due to their constant vigilance and concern for their sick children's well-being and future. Many parents of children and adolescents with cancer endure significant psychological distress linked to their children's diagnosis, manifesting as anxiety, depression, and symptoms of post-traumatic stress disorder (PTSD).[22,34,35] observed that the parents of children and adolescents with cancer face considerable emotional and psychological stress throughout the caregiving process, leading to physical, social, and psychological challenges. The emotional impact of the diagnosis was not confined to a singular moment but persisted over an extended period with varying intensities and diverse emotional expressions.[23]

The current study reveals the profound changes that occur in families' lives following the diagnosis of childhood cancer, which significantly alters dynamics within the household. The demands of the sick child's extensive medical treatment, prolonged hospital stays, frequent medical appointments, medication regimens, and the need for full-time care was found to impose considerable strains on Omani parents, particularly mothers, affecting their ability to manage their usual household responsibilities. Existing literature highlights disruptions to family routines, constrained social interactions, and the myriad challenges associated with both the disease and its treatment.[7,25,36] Further found that the parents of children with cancer experience heightened domestic burdens, increased levels of stress, a scarcity of time for social engagement, heightened fear and anxiety, self-fatigue, and limited social opportunities for their healthy children.[7]

However, the present study also reports positive transformations in parental relationships following their child's cancer diagnosis, marked by increased closeness, cohesion, cooperation, and mutual support. These enhancements were attributed to the shared responsibility of caring for the ill child and their partner's sustained presence alongside them throughout the caregiving journey.[25,37,38] Conversely, another study reported an initial stress on marital relationships during diagnosis and early hospitalization, which gradually normalized over time among mothers of children with leukemia in Oman.[23]

The current study reveals that the requirement for parents to provide full-time care to the sick child often leads to reduced attention given to healthy siblings, resulting in feelings of jealousy. This finding aligns with previous research indicating that siblings may experience jealousy due to diminished parental focus and increased concern for the sick child.[7,8] Nonetheless, the present study found that mothers reported adopting a healthier lifestyle regimen, indirectly benefitting the whole family, emphasized the importance of a healthy diet for children and adolescents undergoing cancer treatment to bolster their ability to cope with the demands of treatment and combat infections.[39]

Parents' social isolation emerged partly as a notable consequence of parents' concerns about their child's compromised immunity and heightened susceptibility to infections. Consequently, they withdrew from social interactions, including those with relatives and friends. A primary reason for this withdrawal was their reluctance to disclose their child's diagnosis, aiming to pre-empt further inquiries, discussions, and comments. Supporting these findings, a study highlighted how mothers of children with cancer often find themselves without a social life, rarely leaving the house or engaging in social interaction upon returning from lengthy hospital stays due to concerns about infection.[25]

Despite the availability of free treatment funded by the Omani Government, extended hospital stays often necessitated parents to take unpaid leave from work, impacting their finances. Moreover, frequent medical appointments, as well as the distance to specialized treatment centers, added to their financial strain by imposing additional commuting expenses. The existing literature echoes these challenges, with parents of children with cancer often facing financial difficulties due to the additional costs of caring for their child, which may include extra supplies and the loss of employment due to increased childcare requirements and extended hospital stays.[8,24] Furthermore, the present study also reveals a decline in parents' health following their child's cancer diagnosis, with those already managing chronic illnesses neglecting their own health needs. Previous research indicated that parents of children and adolescents with cancer commonly experience fatigue, depression, insomnia, and sleep deprivation due to the burdens of caregiving.[18,40,41]

Nevertheless, this study highlights the diverse coping mechanisms employed by Omani parents to navigate the challenges of their child's illness journey, encompassing social, professional, spiritual, and experiential support strategies. Social support emerged as a cornerstone for parents of children with cancer, with partners, family members, friends, and other parents of pediatric cancer patients playing pivotal roles. Partner support, in particular, was emphasized, extending beyond emotional encouragement to encompass practical assistance, such as caregiving for the sick child and attending to the needs of healthy siblings. Family members contributed significantly by providing emotional solace, caring for siblings during hospital stays, and offering both emotional and financial aid. Friends also offered moral support and assistance with household responsibilities. Parents found solace in professional support networks, including hospital support groups, which offer a sense of hope and optimism through shared experiences of other families navigating similar journeys. These groups served as invaluable sources of encouragement, helping parents maintain resilience in the face of adversity. A previous study conducted in Oman echoed these findings, underscoring the crucial role of extended family members, particularly grandparents, aunts, and uncles, in providing unwavering support to mothers caring for children with leukemia.[23] Also, mothers caring for children undergoing active cancer treatment receive invaluable, significant moral and psychological support from their spouses, families, and friends.[18]

Spirituality and religion emerged as a particularly important coping mechanism in the current study. The vast majority of Omani parents coped with their child's illness by accepting the disease, placing their faith in *Allah's* (God's) will, and believing their child's affliction as a chosen trial from *Allah* (God). Similarly, research indicates that mothers of children with cancer treatment often rely on spiritual practices to navigate the treatment process,[18,23] with parents caring for children with cancer reporting that they feel better and less disappointed after engaging in prayer and receiving spiritual support.[16]

Furthermore, in this study, Omani parents' coping improved over time after they navigated the uncertainty and stress of the immediate post-diagnosis stage, and their child's illness became more manageable. Previous studies have shown that caregivers, especially parents, report elevated levels of anxiety, depression, and PTSD during the diagnosis phase compared to later stages of treatment and follow-up.[42-44] Furthermore, parents sought to educate themselves by reading and researching their child's condition, with this newfound knowledge helping them overcome challenges. Seeking information about the disease and its treatment was a crucial aspect of family coping with cancer.[45]

Several Omani parents believed that their children's cancer was caused by the "evil eye" or envy, which they attributed to not invoking the name of *Allah* (God) when their child's positive attributes were mentioned. Given that Oman is a Muslim nation deeply shaped by Islamic culture, many parents also perceived their child's illness as an affliction from *Allah* (God), meant to test their patience and resilience in the face of adversity. These findings align with previous research indicating that Omani cancer patients held similar beliefs about the causes of their illness.[46] Also, mothers of children diagnosed with cancer attributed the disease to supernatural causes, as well as biomedical factors.[47] In Arab-Muslim societies, this concept is frequently used to describe the supposed connection between envy in others and the occurrence of any unfortunate events that cannot be otherwise easily explained.[48] In addition, in this study, the primary treatments, besides medical therapy, were based on common spiritual and religious practices previously described, such as prayer, reading the *Quran*, reciting *Ruqyah*, and drinking *Zamzam* water. Muslims in Oman believe in the healing powers of the *Quran*, with the recitation of its passages seen as a source of comfort and cure for cancer.[46,49] Remarkably, a recent study found that reciting Quranic verses on cancer cell cultures inhibited cell viability, migration, and proliferation.[50]

Moreover, the findings of this study indicated a profound sense of communal dread associated with the word "cancer", with Omani parents describing it as a serious, challenging, terrifying, malevolent, and ultimately fatal disease. They tended to avoid pronouncing it, instead preferring to use medical jargon and indirect expressions. Similarly, in other Arab-speaking communities where cancer is particularly dreaded and considered incurable and deadly, individuals avoid using the Arabic word for "cancer".[24,51] Much like in the present study, they instead employ medical terms.[24] or indirect expressions and coded language such as "that disease" or "the bad disease".[51]

Oman parents of children and adolescents diagnosed with cancer of different ages, cancer types, disease stages, and intervals since diagnosis were recruited from two of the three tertiary cancer referral facilities in Oman, both of which receive patients from across the country, to capture a broad and diverse range of experiences, resulting in rich, varied and saturated data. However, this study has some limitations that should be considered. First, the inclusion criteria restricted participants to parents of children and adolescents aged 6 to 18 years, potentially excluding the experiences of parents with younger children diagnosed with cancer in Oman. Second, the limited number of fathers included in the study may hinder a comprehensive understanding of the psychosocial experiences of fathers caring for a child with cancer.

Conclusion and Recommendations

The findings of this study reveal that Omani parents of children and adolescents diagnosed with cancer experience a challenging emotional journey with significant social, and financial impacts. Therefore, the study underscores the importance of collaborative efforts among healthcare systems, policymakers, and community stakeholders to enhance the quality of care and psychosocial support for Omani parents dealing with childhood and adolescent cancer. It recommends that hemato-oncology centers integrate psychosocial support services, including counseling and support groups, into pediatric care to address both emotional and psychological needs. Financial assistance programs should be established to alleviate the economic burden on families, and public health initiatives must focus on raising awareness, dispelling misconceptions. Furthermore, further research into the psychosocial experiences of Omani fathers and their children, as well as developing and assessing intervention programs to identify areas for support and develop evidence-based strategies are needed.

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