

# Quality of life and coping strategies used by parents of children with autism spectrum disorder in Oman

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## Abstract

**Objective:** Raising a child with autism spectrum disorder (ASD) can have a significant impact on quality of life (QOL). This study was conducted to assess the QOL and coping strategies of parents of children with ASD in Oman.

**Method:** This descriptive cross-sectional study was conducted at Al-Masarra psychiatric hospital. Telephone interviews were conducted with the parents of all children diagnosed with ASD and attending Al-Masarra Hospital between January 2018 and October 2021. Data were collected using the Ways of Coping Checklist-Revised and World Health Organization Quality of Life Assessment-Brief.

**Results:** A total of 304 parents participated in the study (response rate: 100%), of which 59.5% were female. The mean age of the parents and children with ASD was  $40.4 \pm 6.9$  and  $8.4 \pm 2.3$  years, respectively. Most children with ASD were male (78.3%) and entirely dependent upon their parents (18.1%). Seeking social support was the most common coping strategy ( $75.53 \pm 13.99$ ), while escape avoidance was the least common ( $51.78 \pm 8.04$ ). Most parents (48.7%) rated their QOL as good to very good, with acceptable scores in the psychological ( $70.92 \pm 11.22$ ) and social ( $73.27 \pm 11.46$ ) domains, borderline in the physical health domain ( $63.51 \pm 7.77$ ), and poor in the environmental domain ( $58.31 \pm 11.00$ ).

**Conclusions:** Omani parents of children with ASD utilize various coping strategies, with coping skills considered a positive index for mental health in general. No significant differences were observed between Omani fathers and mothers in terms of QOL or coping strategies.

## Keywords

Autism spectrum disorder, parents, children, quality of life, coping strategies, Oman

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## Introduction

Autism spectrum disorder (ASD) refers to a group of complex developmental conditions characterized by challenges in social interaction, speech and nonverbal communication, and restricted/repetitive behaviors (American Psychiatry Association, 1994). Most patients with ASD are diagnosed at the age of 2 to 3 years old. In recent years, the global prevalence of ASD has increased as a result of advances in diagnosis and identification as well as better community awareness; according to a systematic review, the median prevalence among studies published between 2012 and 2021 was 100 cases per 10,000 population (range: 1.09–436.0 cases per 10,000 population; Zeidan et al., 2022). In Oman, a country in the Gulf Cooperation Council (GCC) region, recent research has revealed that the prevalence of ASD has similarly increased from 1.4 cases per 10,000 population in 2009 to 20.35 cases per 10,000 population between 2012 and 2018 (Al-Farsi et al., 2011; Al-Mamri et al., 2019).

According to the World Health Organization (WHO), quality of life (QOL) is defined as an “individual’s perception of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns” (World Health Organization, 1993). As an outcome measure, QOL can be assessed over four domains of health (physical, psychological, social, and environmental health). Understanding the QOL of parents of children with ASD is important in order to develop and improve interventions, services, and resources to support caregivers, both to maintain their own physical and mental health as well as help them to adequately care for their child (Giallo et al., 2013). Coping strategies can help individuals deal with stressful situations, thereby improving QOL; however, specific coping strategies often diverge as a result of various factors, including sociocultural influences.

Raising a child with a developmental disorder can have a significant impact on the mental health and resources of parents and caregivers, resulting in decreased psychological well-being (Abettor et al., 2004). In addition, many children with ASD have additional comorbidities, including seizure disorders, intellectual disabilities, and other psychological disorders which can increase caregiving difficulties (Karst & van Hecke, 2012; McStay et al., 2014). In Oman, a local study reported that the family caregivers of children with ASD often experience a greater frequency of psychological disorders compared to those caring for typically developing children, including stress, depression, and anxiety (Al-Farsi et al., 2016).

To the best of the authors’ knowledge, no previous studies have sought to assess the QOL and coping strategies of parents of children with ASD in Oman. While several publications from the GCC region have indicated that parents often rely on their Islamic faith to buffer life

stressors, little is known regarding the coping strategies of parents in Oman, particularly those raising children with developmental disorders such as ASD (Al-Kandari et al., 2017; Giallo et al., 2013). This study therefore aimed to assess QOL and identify specific coping strategies used by Omani parents of children with ASD. This study will highlight the importance of maintaining QOL among caregivers and developing useful coping strategies to mitigate stress. In addition, it is hoped that the findings of this study will motivate policy-makers in Oman to implement additional supportive measures and programs to advocate for and better meet the needs of parents of children with ASD.

## Method

### *Study design, location, and target population*

This descriptive cross-sectional study was conducted in the child psychiatric department of Al-Masarra Hospital, the sole tertiary psychiatry institution in Oman. The hospital offers free psychiatric and mental health services to patients referred from all across the country. The target population included Omani parents of all children diagnosed with ASD and attending Al-Masarra Hospital in the period between January 2018 and October 2021.

### *Inclusion criteria and sampling*

The inclusion criteria consisted of Omani parents of all children aged <12 years who had been clinically diagnosed with ASD with no concomitant psychiatric disorders and who had attended more than one regular follow-up visit at the child psychiatric clinic of Al-Masarra Hospital during the study period. All diagnoses of ASD followed the standard diagnostic criteria reported in the Diagnostic and Statistical Manual of Mental Disorders IV (American Psychiatry Association, 1994). In order to be eligible for inclusion in the study, each participant had to be the primary caregiver of the child, living in the same residence as the child, and have no history of psychiatric disorders such as major depression or schizophrenia. Using a convenience sampling strategy, a total of 304 parents of children with ASD were recruited.

### *Data collection tools*

To begin with, eligible participants were identified from a list obtained from Al-Masarra Hospital detailing their names, ages, contact details, and date of the last visit to the child psychiatric clinic. Subsequently, telephone interviews were conducted with all eligible parents to collect information regarding the parents’ and children’s sociodemographic and clinic characteristics as well as data related to the parents’ QOL and coping strategies.

A data gathering sheet was used to collect information related to the sociodemographic and clinical characteristics of the parents and their children with ASD. The sheet included questions regarding the parent's age, gender, median income, education level, employment status, marital status, total number of children, and birth order, as well as questions to determine the child's age, gender, and age at which symptoms of ASD had first appeared.

A validated Arabic version of the World Health Organization Quality of Life Assessment-Brief (WHOQOL-BREF) was used in this study to assess the parents' QOL over four domains (physical, psychological, social, and environmental health). The WHOQOL-BREF contains 26 items, each of which is scored from 1 to 5, with higher scores indicating greater QOL (Lazarus & Folkman, 1985). The items cover various aspects of QOL, including physical capacity (seven items), psychological well-being (six items), social relationships (three items), and environmental health (eight items). For the current study, a cut-off score of 60 was used to classify acceptable, borderline, or poor overall QOL (Lazarus & Folkman, 1985).

Specific coping strategies used by the parents were assessed using an Arabic version of the Ways of Coping Checklist-Revised (WCC-R), a comprehensive checklist comprising 66 items to determine how individuals respond and behave during specific stressful events (Balubaid & Sahab, 2017). These items are grouped into eight subscales, each of which represents a specific coping strategy: confrontive coping (six items), distancing (six items), self-controlling (seven items), seeking social support (six items), accepting responsibility (four items), escape avoidance (eight items), planful problem-solving (six items), and positive reappraisal (seven items) (Balubaid & Sahab, 2017).

The WCC-R scale is considered one of the most widely used comprehensive measures of coping. Each coping strategy is assessed on a scale ranging from 0 (not used) to 3 (used a great deal) in order to determine the extent to which each coping strategy is utilized by the individual (Balubaid & Sahab, 2017). For this study, the WCC-R was translated into Arabic by the researchers after obtaining official permission from one of the authors of the original checklist.

### Statistical analysis

EpiData software was used to structure and analyze the collected data (EpiData Association, Denmark). The sociodemographic and clinical characteristics of the parents and their children with ASD were reported using frequencies and percentages. In addition, mean scores for the WCC-R and WHOQOL-BREF scales

and subscales were calculated in consultation with a statistician.

### Ethical considerations

Ethical approval for this study was obtained from a regional research committee in Muscat, Oman. Written informed consent was obtained from all participants. No coercion was used to recruit the sample. All participants were made aware of the study's aims, duration, and their right to refuse to participate. In addition, participants were advised that they had the right to discontinue the interview at any time should they feel discomfort or psychological distress. Confidentiality was ensured by using an identification number to identify data rather than names.

### Results

A total of 304 parents participated in the study (response rate: 100%), of which 181 (59.5%) were female. The mean age of the parents was  $40.4 \pm 6.9$  years (range: 24–68 years). The vast majority ( $n = 290$ ; 95.4%) were married. More than half ( $n = 180$ ; 59.2%) had a monthly net income of 500 to 1,000 Omani rials (equivalent to \$1,300–2,600 USD). In terms of education, 109 (35.9%) had finished high school, 82 (27%) held a diploma, and 58 (19.1%) held a bachelor's degree or higher qualification (Table 1). Approximately one-third ( $n = 103$ ; 33.9%) had five or more children, including one child with ASD.

Just over half of the participants ( $n = 155$ ; 51%) reported that the primary caregiver for the child with ASD was the

**Table 1.** Sociodemographic characteristics of the participants.

Characteristic	n (%)	
	Fathers (n = 123)	Mothers (n = 181)
Age, mean $\pm$ SD	42.1 $\pm$ 7.3	39.1 $\pm$ 6.5
Education level		
11th grade or below	16 (13)	39 (21.5)
High school	37 (30.1)	72 (39.8)
Diploma	40 (32.5)	42 (23.2)
Bachelor's degree or higher	30 (24.4)	28 (15.5)
Marital status		
Married	121 (98.4)	169 (93.4)
Divorced/widowed/separated	2 (1.6)	12 (6.6)
Employment status		
Employed	95 (79.8)	78 (44.1)
Unemployed	28 (20.7)	99 (56.9)
Monthly net income		
<500 OMR	28 (22.8)	42 (23.2)
500–1000 OMR	67 (54.5)	113 (62.4)
>1,000 OMR	28 (22.8)	26 (14.4)

SD: standard deviation; OMR: Omani rials.

mother, while less than half ( $n = 147$ ; 48.4%) reported that this role was fulfilled by both parents. Only two participants (0.7%) reported that the father was the primary caregiver. Of the 304 children with ASD, 283 (78.4%) were male. The mean age of the children was  $8.4 \pm 2.3$  years (range: 3–12 years), while the mean age at which ASD symptoms first appeared and at clinical diagnosis was  $2.2 \pm 0.7$  and  $3.0 \pm 1.1$  years, respectively. A total of 230 parents (75.7%) reported that their child was partially dependent on them whereas 55 (18.1%) reported that their child was entirely dependent on them. Nineteen parents (6.3%) reported that their child was fully independent.

### Quality of life

With regard to the first two questions in the WHOQOL-BREF scale (*How would you rate your QOL?* and *How satisfied are you with your health?*), there was no statistically significant difference in mean scores between fathers and mothers using an independent samples *t*-test ( $p = 0.660$  and  $0.716$ ) (Table 2). Overall, just under half of the parents ( $n = 148$ ; 48.7%) rated their QOL as being good to very good; in addition, the majority ( $n = 172$ ; 56.6%) were satisfied to very satisfied with their health (Table 3).

In terms of specific domains of QOL, both fathers and mothers reported similar scores for the physical ( $65.14 \pm 7.75$  versus  $62.40 \pm 7.60$ ), psychological ( $73.14 \pm 10.98$  versus  $69.41 \pm 11.16$ ), social ( $74.20 \pm 11.67$  versus  $72.63 \pm 11.30$ ), and environmental ( $60.98 \pm 10.33$  versus  $56.49 \pm 11.10$ ) health domains, although mothers reported relatively lower scores across all four domains. Using a cut-off score of 60, the participants reported acceptable QOL scores in the psychological ( $70.92 \pm 11.22$ ) and social ( $73.27 \pm 11.46$ ) health domains, borderline QOL in the physical health domain ( $63.51 \pm 7.77$ ), and poor QOL in the environmental health domain ( $58.31 \pm 11.00$ ) (Table 4).

### Coping strategies

In terms of mean WCC-R scores, seeking social support was reported to be the most commonly used coping strategy

**Table 2.** Mean scores for WHOQOL-BREF overall QOL and general health.

Item	Group	N	Mean score $\pm$ SD	<i>p</i> -value
How would you rate your QOL?	Fathers	123	$70.24 \pm 15.44$	0.660
	Mothers	181	$71.05 \pm 15.83$	
How satisfied are you with your health?	Fathers	123	$72.85 \pm 17.39$	0.716
	Mothers	181	$72.15 \pm 14.39$	

WHOQOL-BREF: World Health Organization Quality of Life Assessment-Brief; SD: standard deviation; QOL: quality of life.

among both the fathers ( $74.12 \pm 14.06$ ) and mothers ( $76.50 \pm 13.90$ ) of children with ASD, followed by positive reappraisal ( $72.44 \pm 9.12$  and  $73.41 \pm 9.64$ ). Meanwhile, escape avoidance and distancing were the least frequently used coping strategies by both fathers ( $50.41 \pm 8.52$  and  $51.90 \pm 7.80$ ) and mothers ( $52.72 \pm 7.58$  and  $52.21 \pm 8.70$ ) (Table 5).

## Discussion

### Quality of life

Impaired QOL among the parents of children with ASD can result in severe physical and psychological consequences, including anxiety, depression, social withdrawal, and fatigue, all of which may affect not only the individual themselves, but also the quality of care being provided to the child (Skevington et al., 2004). Using a WHOQOL-BREF cut-off score of 60 to rank overall QOL as acceptable, borderline, or poor, our study showed that the parents of children with ASD in Oman reported acceptable or above-average overall QOL ( $65.02 \pm 8.29$ ). Our findings are consistent with those reported by a similar study conducted in Saudi Arabia that found that more than half of the participants had acceptable overall QOL scores (Asi, 2016).

Previous studies have indicated that raising children with ASD is often challenging for parents, affecting their physical and mental health, finances, and social relationships. As such, the parents or family caregivers of children with ASD often report poorer QOL scores in at least one domain compared to the parents of normally developing children (Skevington et al., 2004). With regard to specific

**Table 3.** Frequency of responses to the WHOQOL-BREF overall QOL and general health items.

Response	<i>n</i> (%)		
	Fathers ( <i>n</i> = 123)	Mothers ( <i>n</i> = 181)	Total ( <i>n</i> = 304)
How would you rate your QOL?			
Very poor	0 (0)	2 (1.1)	2 (0.7)
Poor	8 (6.5)	7 (3.9)	15 (4.9)
Neither poor nor good	57 (46.3)	82 (45.3)	139 (45.7)
Good	45 (36.6)	69 (38.1)	114 (37.5)
Very good	13 (10.6)	21 (11.6)	34 (11.2)
How satisfied are you with your health?			
Very dissatisfied	2 (1.6)	0 (0)	2 (0.7)
Fairly dissatisfied	6 (4.9)	9 (5)	15 (4.9)
Neither satisfied nor dissatisfied	46 (37.4)	69 (38.1)	115 (37.8)
Satisfied	49 (39.8)	87 (48.1)	136 (44.7)
Very satisfied	20 (16.3)	16 (8.8)	36 (11.8)

WHOQOL-BREF: World Health Organization Quality of Life Assessment-Brief; SD: standard deviation; QOL: quality of life.

**Table 4.** Mean scores per domain for the WHOQOL-BREF items.

Domain <sup>a</sup>	Mean score $\pm$ SD		
	Fathers (n = 123)	Mothers (n = 181)	Total (n = 304)
Physical health	65.14 $\pm$ 7.75	62.40 $\pm$ 7.60	63.51 $\pm$ 7.77
Psychological health	73.14 $\pm$ 10.98	69.41 $\pm$ 11.16	70.92 $\pm$ 11.22
Social health	74.20 $\pm$ 11.67	72.63 $\pm$ 11.30	73.27 $\pm$ 11.46
Environmental health	60.98 $\pm$ 10.33	56.49 $\pm$ 11.10	58.31 $\pm$ 11.00
Overall QOL	66.95 $\pm$ 8.17	63.71 $\pm$ 8.14	65.02 $\pm$ 8.29

WHOQOL-BREF: World Health Organization Quality of Life Assessment-Brief; SD: standard deviation; QOL: quality of life.

<sup>a</sup>Standardized total scores (percentages) were used to facilitate comparisons between domains.

**Table 5.** Mean scores for the eight WCC-R coping subscales.

Subscale <sup>a</sup>	Mean score $\pm$ SD		
	Fathers (n = 123)	Mothers (n = 181)	Total (n = 304)
Confrontive coping	55.78 $\pm$ 8.97	57.48 $\pm$ 9.55	56.79 $\pm$ 9.34
Distancing	51.90 $\pm$ 7.80	52.21 $\pm$ 8.70	52.08 $\pm$ 8.34
Self-controlling	64.51 $\pm$ 8.91	63.86 $\pm$ 8.36	64.12 $\pm$ 8.58
Seeking social support	74.12 $\pm$ 14.06	76.50 $\pm$ 13.90	75.53 $\pm$ 13.99
Accepting responsibility	58.89 $\pm$ 10.70	59.51 $\pm$ 9.60	59.26 $\pm$ 10.05
Escape avoidance	50.41 $\pm$ 8.52	52.72 $\pm$ 7.58	51.78 $\pm$ 8.04
Planful problem-solving	67.92 $\pm$ 11.12	67.32 $\pm$ 11.23	67.56 $\pm$ 11.17
Positive reappraisal	72.44 $\pm$ 9.12	73.41 $\pm$ 9.64	73.02 $\pm$ 9.43
Total	61.81 $\pm$ 5.81	62.70 $\pm$ 5.49	62.34 $\pm$ 5.63

WCC-R: Ways of Coping Checklist-Revised; SD: standard deviation.

<sup>a</sup>Standardized total scores (percentages) were used to facilitate comparisons between the subscales.

domains of QOL, the parents in the present study reported acceptable QOL in the psychological and social health domains, borderline QOL in the physical health domain, and poor QOL in the environmental health domain. Both fathers and mothers showed a similar pattern of physical, psychological, social, and environmental health scores, although mothers reported lower scores across all four domains in comparison to fathers. This finding can be explained by the fact that mothers generally represent the primary caregivers for children with ASD and would therefore be much more heavily involved in taking care of the children compared to fathers and therefore more susceptible to the burdens of such care. Similar findings have been reported by researchers in Saudi Arabia and China (Alamri et al., 2020; Alenazi et al., 2020; Skevington et al., 2004).

Our study revealed that the highest mean QOL score was in the social health domain, which incorporates personal relationships and emotional, psychological, informational, and physical support. The nature of the local Omani culture may partially explain why this domain received the highest score by both fathers and mothers, as an extended family system is the dominant social structure in

Oman. Such family network systems can play an integral role in mitigating challenges for the parents of children with ASD by strengthening their psychological health and providing additional financial assistance and informational and instrumental support. Indeed, previous research conducted in other GCC and Middle Eastern countries such as Kuwait and Jordan has shown that parents of children with ASD in this region often report higher scores for social health (Giallo et al., 2013; Wang et al., 2018). In contrast, when a similar measurement was used to assess self-reported QOL scores among parents of children with ASD in India, the results showed significant impairment in this domain. This was because many Indian parents tried to avoid social interaction and did not inform relatives of their child's health condition due to elements of social stigma, with many considering ASD to be a condition of which one should feel ashamed (Dardas, 2014).

In contrast, the lowest QOL scores for both fathers and mothers in the present study were reported for the environmental health domain. This may be partly explained by the parents' socioeconomic status, as most participants had monthly net incomes of 500 to 1,000 Omani rials (equivalent to \$1,300–2,600 USD), with almost a quarter of the

participants having an income of <500 Omani rials. According to a one-way analysis of variance, there was a statistically significant correlation between income and the parents' overall QOL and environmental health scores. Income can affect living conditions as well as transport and childcare logistics, all of which may be disproportionately more difficult for parents raising children with developmental disabilities like ASD. Moreover, having a child with ASD may result in additional expenses compared to the cost of raising a typically developing child, as the former group will require additional care, resources, and support (Skevington et al., 2004). Previous studies have identified a strong correlation between high monthly income and high scores in overall QOL and environmental health (Alamri et al., 2020; Alenazi et al., 2020). A study conducted in Turkey reported that the lowest score was in the domain of physical/material well-being using the Beach Center Family QOL scale; this finding was linked to the additional financial struggle faced by the Turkish parents of children with intellectual disabilities and ASD (Perumal et al., 2014).

### *Parental coping*

Seeking social support was found to be the most commonly used coping strategy among Omani parents of children with ASD. It is well established that a strong social support system enhances resilience to stressful situations and negative life events and improves overall well-being (Bromley et al., 2004; Meral et al., 2013). Seeking social support is one of the most common and effective strategies utilized by the parents of children with ASD (Johnson et al., 2011). Moreover, prevailing culture also has an effect on methods of coping in certain populations; in Arab countries such as Oman, social support from the extended family plays a significant role in buffering life stressors (Gray, 2006). Indeed, Dardas found that seeking social support was one of the most commonly employed coping strategies among Jordanian parents of children with ASD (Wang et al., 2018). However, while the present study found no gender differences with regard to the frequency of use of this coping strategy among Omani parents, previous research has indicated that mothers are more likely to seek social support compared to fathers, with this type of support usually being sought from family, friends, and professionals (Altiere & von Kluge, 2009; El-Islam, 2008; Gray, 2003).

The second most common coping strategy identified in our study was positive reappraisal. According to Lazarus and Folkman, this strategy refers to the attempt to restructure and redefine a stressful experience so that it is imbued with meaning and reconceived in such a way as to offer some advantage (Bilgin & Kucuk, 2010). This type of 'positive thinking' reframing strategy is often focused on personal growth and may also be linked to

religiosity. A prior literature review reported that positive reappraisal can provide a protective effect from passive psychological symptoms of anxiety and depression (Lazarus & Folkman, 1984). Another study noted that an increase in positive reappraisal coping was associated with a decrease in parental distress (Garnefski & Kraaij, 2009). Religiosity and faith have also been found to provide additional support to parents' ability to cope with the stress associated with raising a child with ASD. For instance, the majority of parents in the current study reported that they often prayed as a way to bring comfort and acceptance. This result is consistent with the previous literature supporting the notion that religion plays a major role in coping with challenges encountered when raising a child with ASD in the Middle East (Giallo et al., 2013; Wang et al., 2018).

In contrast, escape avoidance and distancing were the least frequent coping strategies reported by Omani parents of children with ASD. Escape avoidance is a maladaptive way of coping with stressful situations in which the individual avoids addressing or dealing with the issue in question. On the other hand, a person who employs a distancing coping strategy will realize the problem, but intentionally remove themselves from it so as to reduce its significance and impact (Rayan & Ahmad, 2018). Ahmad and Dardas found distancing to be the least frequently reported coping strategy among the parents of children with ASD in Jordan (Folkman & Lazarus, 1988). There are conflicting findings as to whether distancing represents a positive or negative coping mechanism, with some researchers indicating that distancing may have a negative impact on mental health while others consider that this mechanism may act as a helpful, albeit temporary, moderator in the relationship between stressors and mental health (Dardas & Ahmad, 2015; Smith et al., 2008). That being said, escape avoidance is another moderator coping strategy which may temporarily improve QOL and reduce stress among the parents of children with ASD (Folkman & Lazarus, 1988). However, Kashdan et al. (2006) found that avoidance can increase levels of depression and anxiety (Dunn et al., 2001). This strategy may therefore be beneficial for short periods of time, but is not a suitable method of dealing with situations involving chronic stressors (Kashdan et al., 2006).

In summary, the result of the current study showed that Omani parents of children with ASD apply different coping methods. Indeed, the skills needed to employ a variety of coping mechanisms may be considered a positive index for mental health in general. The finding of this study also showed no significant differences between fathers and mothers in terms of the frequencies of various types of coping strategies. This finding is consistent with those reported by Dabrowska and Pisula (Heckman et al., 2004). In contrast, other studies have indicated that mothers tend to apply more emotion-focused functional coping strategies, such as social support or expressing

emotions, while fathers more frequently apply mechanisms of self-efficacy and problem avoidance; this difference might be explained by variations in the nature of their employment and time spent outside of the home (Dabrowska & Pisula, 2010).

Several limitations of the present study should be acknowledged. Since much of the data were collected during telephone interviews, some parents may have felt uncomfortable disclosing certain information to the interviewer, especially regarding their emotional reactions. In addition, all of the interviewers were female, an element that might have caused additional discomfort for fathers. Since the target population of the study comprised the parents of children without additional comorbidities and who were currently receiving medical attention, the results cannot be generalized; moreover, the sample size was relatively small and the study was conducted at a single center. Furthermore, as culture plays a key role in coping strategies, generalization of the data to other populations is limited. Finally, in light of the cross-sectional nature of the study and the fact that both coping and QOL are time- and context-dependent conditions, further longitudinal research is needed to identify changing trends and investigate factors that might affect parental coping strategies and QOL.


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