



## Parental satisfaction and associated factors towards the Service Quality at the Taif Children's Hospital

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### Abstract

This study aims to examine the level of parental satisfaction, as expressed through the perceptions of parents regarding the quality of services at Taif Children's Hospital in attempt to come up with better measures to improve the quality of services delivered to the patients, and to identify factors associated with this level of satisfaction. A well-developed validated and reliable questionnaire including six domains: "general satisfaction", "facilities and amenities", "staff attitude and behavior", "communication and information sharing", "timeliness and accessibility", and "continuity of care" was used in this cross-sectional study on 4871 parents, over a 3-month period. The degree to which sociodemographic characteristics and parent's satisfaction are associated was assessed using multivariate regression analysis. The results of this study showed that the level of parental satisfaction with all 17 items of the study questionnaire was high. The staff attitude and behavior domain received a mean of (3.89 out of 5) compared to (3.89) for general satisfaction. Timeliness and accessibility (3.87) was followed by communication and information sharing (3.81), and continuity of care (3.8). The facilities and amenities domain received the lowest rating (3.74). In terms of the factors associated with parents' satisfaction with the service quality, the current study showed that elderly age, single, divorce or widowed, lower educated parents without health literacy had lower levels of satisfaction than younger, married, more educated parents with health literacy, respectively. The findings of the study could serve as a reference point for assessing the quality of healthcare services in Saudi Arabia and provide a foundation for initiating quality assurance processes.

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### Introduction

The quality of care should be at the center of any modern healthcare services focusing on the needs of patients. Parent's satisfaction is a vital aspect of healthcare service quality, especially in the context of hospitals. Satisfied parents not only facilitate positive experiences for themselves but also contribute to better patient outcomes and organizational reputation.

Today, healthcare facilities are more concerned in increasing and maintaining the levels of patient's satisfaction to gain a competitive advantage in the healthcare industry. As a result, the satisfaction of patients has become an accepted indicator of quality of care (Tsironi & Koulirakis, 2019) <sup>[41]</sup>. However, parent's satisfaction with service quality at hospitals refers to the level of contentment or fulfillment experienced by parents or caregivers regarding the services provided by hospitals for the care and treatment of their children (Almutairi *et al.*, 2020; Lee *et al.*, 2016; Al-Doghaither, 2015) <sup>[4, 1]</sup>. It encompasses various aspects such as the competence and professionalism of healthcare providers, the accessibility and convenience of services, the effectiveness of treatments, the responsiveness of staff, the communication and information provided, the cleanliness and safety of the facility, and the overall experience of receiving healthcare services for their children (Admass *et al.*, 2022, Elgazzar *et al.*, 2013) <sup>[17]</sup>. Therefore, the level of parent satisfaction in the healthcare setting is a function of their personal expectations and preferences as far as healthcare is concerned. Like any other organization, a healthcare institution must meet the expectations and requirements of their clients/patients by being aware of their needs. The level of satisfaction of a parent is related to the extent to which their needs, condition-specific expectations, and healthcare needs are met (Israel-Aina *et al.*, 2017) <sup>[26]</sup>. Notably, in the pediatric care, the parents are the decision makers because they have to decide where and when to access care for their children, thus their satisfaction with the healthcare services given to their children is paramount in ensuring continued access to such care in the future (Keiza, Chege, & Omuga, 2017) <sup>[27]</sup>.

Patient satisfaction is an important measure of the quality of services offered by hospitals because it provides healthcare providers with information on the needs and expectations of a patient (Alemu, 2022) <sup>[2]</sup>. Satisfied patients are more likely to play an active role and comply with their treatment. The parent of a child is therefore likely to continue treatment if they are satisfied with the services they receive. Therefore, it is important for a healthcare system to develop an evaluation process to improve the quality and satisfaction in services received by patients. The information provided by patients is also important for the providers because it helps to identify the areas that need improvement (Admass *et al.*, 2022; Heidegger, Saal, & Nübling, 2013) <sup>[23]</sup>. The role of parent satisfaction in their children's care has long been identified as an effective measure of the quality of services delivered. Parent satisfaction has indeed been recognized as an important measure of the quality of services delivered, particularly in the context of children's care (McAllister & Greenblatt, 2007; Sices *et al.*, 2003; Gavidia-Payne, Stoneman, & Davies, 2003; Epstein & Cullinan, 1998) <sup>[34, 38]</sup>. Parental satisfaction is one of the most effective strategies in improving childcare and reducing child mortality rate. Low parental satisfaction may lead to discharge against medical advice, increased readmission, morbidity, and mortality (Smith, Johnson, & Thompson, 2019) <sup>[40]</sup>.

Different studies have identified several factors associated with the quality of healthcare and parental satisfaction in different countries. According to Alemu *et al.* (2022) <sup>[2]</sup> such factors include sociodemographic characteristics such as parental age, sex, and level of education as being associated with parental satisfaction. Parental age can impact satisfaction levels. Younger parents may have different expectations and preferences compared to older parents. For

example, younger parents may value convenience, technology integration, and online communication, while older parents may prioritize personal interactions and reassurance (Marchiondo & Marchiondo, 2010) <sup>[33]</sup>. A study by Khowaja *et al.* (2019) found that parents with higher income levels were more likely to report higher satisfaction with the quality of care provided in children's hospitals. Study by Fong *et al.* (2018) showed that parents with higher education levels were more likely to have higher satisfaction with the communication and information provided by healthcare providers in the pediatric emergency department. In addition, Bettenhausen *et al.* (2017) found that parents in rural areas reported lower satisfaction with pediatric hospital care compared to parents in urban areas, primarily due to longer travel distances and limited access to specialized services. Family structure can also influence parental satisfaction. Single parents may face unique challenges and may have different support systems compared to parents in traditional family structures. Hospitals that provide tailored support and resources for single parents can enhance their satisfaction levels (Pilkaukas & Martinson, 2015) <sup>[36]</sup>. Parental health literacy, which refers to the ability to obtain, understand, and use health information, can influence satisfaction levels. Parents with higher health literacy may be more engaged in their child's healthcare, leading to increased satisfaction with the service quality (DeWalt & Hink, 2009) <sup>[16]</sup>. The above-mentioned studies provide insights into the influence of various sociodemographic factors on parental satisfaction with the service quality of children's hospitals. It's important to consider these factors and tailor healthcare services to meet the needs and expectations of parents from diverse backgrounds. By considering and addressing these factors, hospitals can better cater to the unique needs and expectations of parents, ultimately enhancing their overall satisfaction.

The physical environment of the children's hospital, including cleanliness, comfort, and child-friendly spaces, can influence parental satisfaction. Hospitals that create a welcoming and supportive environment for children and their families can contribute to higher satisfaction levels (Huisman *et al.*, 2017; Ulrich *et al.*, 2008) <sup>[24, 42]</sup>. A study by Yildirim *et al.* (2017) <sup>[44]</sup> found that parents' perceptions of the cleanliness and comfort of the hospital environment influenced their satisfaction levels. In addition, length of hospital stay can be considered an important factor in determining parental satisfaction with healthcare services. A shorter hospital stay is often associated with improved parental satisfaction, as it indicates efficient and effective care delivery. On the other hand, a longer hospital stay may lead to increased stress, disruption of daily routines, and additional financial burdens for parents (De Brasi *et al.*, 2019; Khashu *et al.*, 2015; Gauvin *et al.*, 2017) <sup>[15, 29, 20]</sup>.

Khashu *et al.* (2015) <sup>[29]</sup> investigated parental satisfaction with NICU services and its association with various factors, including length of stay. Their study found that shorter length of stay was positively correlated with higher parental satisfaction. In addition, Gauvin *et al.* (2017) <sup>[20]</sup> examined parental satisfaction in a pediatric emergency department and explored factors influencing satisfaction levels. Their study found that shorter length of stay was significantly associated with increased parental satisfaction. However, it is important to note that parental satisfaction is influenced by various other factors as well, including effective communication and information sharing (Coyne *et al.*, 2018; Kuo, *et al.*, 2012)

[31], staff competence and expertise (Glick, *et al.*, 2015; Sjöström-Strand *et al.*, 2018) [21], timely access to care (Burge, *et al.*, 2017) [12], empathy and emotional support (Armstrong, Strassle, & Tumin, 2019; Benkert *et al.*, 2017; Kuo, *et al.*, 2012) [6, 7, 31], and family-centered care (e.g. Involving parents in decision-making, respecting cultural and religious beliefs, and accommodating family dynamics) (Lipstein *et al.*, 2014; Coyne, *et al.*, 2013; Shields *et al.*, 2012; Lipstein *et al.*, 2014) [32] during their child's hospitalization.

Moreover, timeliness and accessibility of healthcare services affect parental satisfaction. A study by Bertakis *et al.* (2018) revealed that shorter wait times significantly improved patient satisfaction in pediatric primary care. In addition, parents prioritize the safety and quality of care provided to their children. A study by Kenner *et al.* (2019) emphasized that parental satisfaction is closely tied to perceptions of safe and effective care in pediatric hospitals, and a study by van Walraven *et al.* (2012) demonstrated that fragmented care and lack of care coordination negatively impacted parental satisfaction in pediatric settings. Parents also appreciate hospitals that provide comfortable and convenient accommodation options for families, especially for those who need to stay overnight or for an extended period. Hospitals that offer family-friendly facilities, such as sleeping arrangements, kitchen facilities, and play areas, can contribute to parental satisfaction (Hynson, Aroni, & Bauld, 2006). Feedback and complaint resolution (Manary *et al.*, 2013), waiting times for appointments, procedures, or emergency care (Bleustein *et al.*, 2014), continuity of care (Haggerty *et al.*, 2013) [22] are also factors that can influence parental satisfaction on the service quality of children's hospitals.

In their study, Tsironi & Koulierakis (2019) [41] argue that differences between parents influence their attitudes thus their level of satisfaction. The underlying premise is that individuals differ in their orientation towards healthcare services because of their broader cultural and social orientation. Additionally, attitudes are moderated by environmental, psychological, situational, and demographic factors (Alnemer *et al.*, 2019). When it comes to children care, parents with different backgrounds could have diverse expectations and perceptions for care. Therefore, it is essential to investigate these factors and adopt effective interventions to improve the quality of healthcare and parent satisfaction.

In sum, understanding parents' satisfaction concerning their children care is clinically relevant because satisfied parents are likely to comply with treatment, take an active role in decision-making process, and they will continue using their current medical care services.

Importantly, healthcare providers may also benefit from satisfaction surveys because they can easily identify areas that require improvement. Therefore, the objective of this study is to examine the level of parental satisfaction, as expressed through the perceptions of parents regarding the quality of services at Taif Children's Hospital in attempt to come up with better measures to improve the quality of services delivered to the patients, and to identify factors associated with this level of satisfaction. However, the knowledge on parental satisfaction will provide information to healthcare providers in the hospital on how they can meet the expectations of parents in delivering acceptable care to their children. Specifically, this study addresses the following

research question: "What are the factors that influence parental satisfaction with the quality of healthcare services?"

## Methodology

### Study Design, Setting and Period

An institution-based cross sectional study was designed to the level of parental satisfaction and associated factors about the quality of services at Taif Children's Hospital, Taif City, Saudi Arabia from January 2023 to April 2023. Taif Children's Hospital is one of the largest children's hospitals in the country thus serving as a referral center for more than 100 health facilities. The hospital not only serves people in the urban centers but also those from rural areas. It offers specialized secondary for children from birth up to 12 years old. The hospital has Emergency Department, Pediatric Inpatient Wards, Step Down Care Unit, Pediatric and Neonatal Intensive Care Units.

### Sample Size Estimation and Sampling Method

By taking the proportion of client satisfaction 73.77% from the study conducted in Riyadh, Saudi Arabia (Aljarallah *et al.*, 2023) and using the single population proportion formula with 95% CI and a 5% margin of error. The minimum sample size was 328 parents after adding a 10% non-response rate. The sample was distributed proportionally in all units of Taif Children's Hospital. Random sampling was used to recruit mother parents of child who has been hospitalized for an average of 3 days at the selected hospital during the study period.

### Data Collection Procedure

Data were collected using questionnaires that delivered to the parents during their third day stay at the hospital. The major researcher informed parents who will meet the inclusion criteria about the importance and purpose of the study. Those who accepted to participate were asked to sign a consent form, and to fill the questionnaires and put them back on an empty envelope and hand them back. Each participant took 20-30 minutes to complete the study questionnaire. The questionnaire (in Arabic) was developed by the current study researchers based on the domains of parental satisfaction about the quality of services Children's Hospital presented in previous studies (see Loureiro & Antunes, 2022). Therefore, the study questionnaire is divided into two sections. The parents' sociodemographic data, including age, marital status, education level, employment status, place of residency, monthly income in Saudi Riyal, and parental health literacy were included in the first section of the questionnaire. The second section of the questionnaire includes (6) dimensions of parental satisfaction: general satisfaction (items 1 and 2); facilities and amenities (items 3, 4, and 5); staff attitude and behavior (items 6, 7, 8, and 9); communication and information sharing (items 10, 11, and 12); timeliness and accessibility (items 13, 14, and 15) and continuity of care (items 16 and 17). The responses were tallied using a 5-Likert scale, from "very satisfied" (score 5) to "very dissatisfied" (score 1). The face validity of the study questionnaire was checked by five clinical staff and three staff researchers. The researchers of this study conducted a pilot test to evaluate reliability of the study questionnaire. Forty parents were enrolled (aged 25-55 years) and completed the questionnaires. The study questionnaire showed a high Cronbach's alpha values for all its scales ranged from (0.87) to (0.92) indicating acceptable internal consistencies. In



addition, test-retest reliability showed that all scales being measured does not change over time (intraclass correlation coefficient (ICC) ranged from (0.85) to (0.94). Item-scale correlations were also carried out to validate the reliability of the study questionnaire. Each item was significantly correlated with its domain ( $> 0.6$ ,  $p \leq 0.01$ ) and with the total score of the questionnaire ( $> 0.4$ ,  $p \leq 0.01$ ). An open question at the end of the study questionnaire was included to ask parents if they have any comments or complaints regarding the service quality of Taif children's hospital (Do you have any comments or complaints?).

Five nurses from the Taif Children's Hospital were recruited and trained by the study researchers to collect data, while two nurses were recruited as supervisors. Data collectors approached participants in their rooms and ask those who are willing to participate in the study, and made them aware of potential risks, objectives of the study, methodology, voluntary nature of their participation, and the confidentiality of the information provided. Unexpectedly, a sample of 5000 participants was participated in this study, and 129 responses were excluded because they did not complete the required questionnaires. Therefore, 4871 participants completed the study, and their data were included in the final analysis.

### Data Analysis

The data collected were entered in a Microsoft Office Excel 2011 Spreadsheet for sorting and coding. After that, the data were imported into IBM Statistical Package for Social Sciences (IBM SPSS) version 20. Quality control was conducted then the data processed and analyzed.

Descriptive statistics were used to summarize the data. One-sample  $t$  test was used to test whether the sample mean is statistically different from a known or hypothesized population mean ( $=3$ ). As a 5-Likert scale was used to assess the level of parent satisfaction, participants were grouped according to their mean scores as follow: mean scores of 1-2.33; 2.34-3.67; 3.68-5, indicative of low, moderate and high satisfaction respectively. To identify associated factors, multiple regression analysis was carried out after testing its assumptions, and those independent variables that are significantly correlated with outcome variable were included in the final model ( $p \leq 0.05$ ).

### Ethical Consideration

The World Medical Association's Declaration of Helsinki (1964–2008) for Ethical Human Research was adhered to strictly. Ethical clearance was also obtained from the Taif Institutional Review Board (IRB) and permission to collect data was approved from the hospital management. Informed consent was also obtained from all participants and those willing to withdrawal were comfortably did so at any time. Confidentiality was maintained throughout the process and no parent was forced to participate.

### Results

#### Socio-Demographic Characteristics of Parents

Table 1 summarizes the socio-demographic characteristics of the participants. Among the total participants, (36.1%) of the

participants were in the age group under the age of 30 years and (15.9%) of them were above the age of 50 years. The majority of the participants (79.6%) were married. About (52%) of the participants were attained a university/higher degree and (14.6%) attained a primary school education level or uneducated. In addition, about (57%) of the participants were employed/self-employed, and most of them (70.1%) lived in urban areas. About (55%) of the participants were having a monthly income ranged between (5000-10000 SR), and (16.2%) of them having a monthly income below 5000 SR. The majority of the participants were with no health literacy (77.5%).

**Table 1:** Socio-demographic characteristics of participants (n=4871)

Variable	Frequency (n)	Percentage (%)
<b>Age</b>		
<30	1758	36.1
30-40	1086	22.3
41-50	1252	25.7
>50	775	15.9
<b>Marital status</b>		
Married	3879	79.6
Single/Divorce/Widowed	992	20.4
<b>Education</b>		
Primary school/uneducated	709	14.6
Intermediate /secondary school	1619	33.2
University/higher degree	2543	52.2
<b>Employment status</b>		
Employed/self-employed	2779	57.1
Unemployed/retired	2092	42.9
<b>Residential place</b>		
Urban	3415	70.1
Rural	1456	29.9
<b>Monthly income</b>		
<5000 SR	789	16.2
5000-10000 SR	2667	54.8
>10000 SR	1415	29
<b>Health literacy</b>		
Yes	1098	22.5
No	3773	77.5

#### Parental Satisfaction about the Service Quality

Table 2 presents the related descriptive statistics in term of the level of parental satisfaction. Results in Table 2 demonstrated that the "General Satisfaction" about the service quality of Taif children's hospital among participants was in high level (mean=3.88; SD=0.43). As shown from Table 2, the means for all domains of service quality of Taif children's hospital ranged from (3.74) to (3.89) indicating high level of satisfaction among participants. These domains can be arranged according to their mean as follows: "Staff Attitude and Behavior" ( $3.89 \pm 0.413$ ); "Timeliness and Accessibility" ( $3.87 \pm 0.374$ ); "Communication and Information Sharing" ( $3.81 \pm 0.52$ ); "Continuity of Care" ( $3.8 \pm 0.51$ ); and finally "Facilities and Amenities" ( $3.74 \pm 0.676$ ). All  $t$  values were significant indicating that the means of the sample were significantly different from the hypothesized population mean value of (3).

**Table 2:** Description of the service quality in different subscales

Service Quality Domain	Mean $\pm$ SD	95% CI	t	Level of Satisfaction
General Satisfaction	3.88 $\pm$ 0.43	3.87-3.89	142.89**	High
Facilities and Amenities	3.74 $\pm$ 0.676	3.72-3.76	76.14**	High
Staff Attitude and Behavior	3.89 $\pm$ 0.413	3.88-3.9	149.83**	High
Communication and Information Sharing	3.81 $\pm$ 0.522	3.8-3.83	106.99**	High
Timeliness and Accessibility	3.87 $\pm$ 0.374	3.86-3.88	163.29**	High
Continuity of Care	3.8 $\pm$ 0.51	3.79-3.82	109.69**	High

\*\*Significant at  $p \leq 0.001$ ; SD: Standard deviation; CI: Confidence interval

### Association between Socio-demographic Variables with Parental Satisfaction

To identify the factors that influence parental satisfaction about the service quality, only significant correlated variables from the correlation analysis were included in multivariate regression model. Age ( $r = -0.42$ ;  $p = 0.002$ ), marital status ( $r = -0.22$ ;  $p = 0.042$ ), education level ( $r = 0.46$ ;  $p = 0.001$ ), employment status ( $r = -0.32$ ;  $p = 0.011$ ) and parental health literacy ( $r = -0.36$ ;  $p = 0.008$ ) showed significant correlations with parental satisfaction about the service quality.

All assumptions of multiple regression were met in this study. Multicollinearity analysis showed that all variables introduced in regression models have lower variance inflation factor (VIF) values ( $< 2.5$ ). In addition, Mahalanobis test indicated that no outliers in data affecting regression model. Regarding the distributions of regression standardized residual for study data, all regression models showed normal distributions. In the scatterplot of the residuals the bulk of data points were between -1 and 1. No outliers were noted in the scatterplot as all data points were lower than 3 and above -3. In summary all assumptions of multiple regression were met in this study.

As shown in Table 3, the regression model confirmed three variables that included age, marital status, education, and health literacy as significant influential factors of parental satisfaction about the service quality ( $p < 0.01$ ) and explained 43% of the variance in parental satisfaction ( $R^2 = 0.43$ ). Parents with increasing age ( $\beta = -0.28$ ,  $p = 0.000$ ), single, divorce or widowed ( $\beta = -0.24$ ,  $p = 0.000$ ), and having no health literacy ( $\beta = -0.23$ ,  $p = 0.000$ ) were associated significantly with lower satisfaction level. Meanwhile, parents having higher education ( $\beta = 0.19$ ,  $p = 0.01$ ) were significantly associated with better satisfaction level.

**Table 3:** Influence of factors on parents' satisfaction

Variable	Parental Satisfaction		
	$\beta$	t	p
Age	-0.28	-7.05	$p \leq 0.001$ **
Marital status	-0.24	-6.63	$p \leq 0.001$ **
Education	0.19	2.51	$p \leq 0.01$ **
Employment status	0.08	1.05	0.09
Health literacy	-0.23	-6.41	$p \leq 0.001$ **
<b>R<sup>2</sup></b>		0.43	
<b>Adjusted R<sup>2</sup></b>		0.38	
<b>F(sig)</b>		192.16 ( $p < 0.001$ **)	

The result of the open question ((Do you have any comments or complaints?)) indicates that (4418) participants with a percent of (90.7%) have no comments or complaints, however, 453 (9.3%) of participants have comments or complaints regarding the service quality of Taif children's hospital. 230 out of 450 comments or complaints were about the lack of cleanliness especially at evening period. Moreover, 145 comments or complaints were about the

unavailability of cleaning supplies of sheets, soap and tissues on the evening period, and 70 comments or complaints were about malfunctions of Air Conditioners (AC). In addition, five comments or complaints were about the taste of dietary /meals, and three comments or complaints were about the limited visiting time.

### Discussion

Saudi Arabia's Vision 2030 is spearheading a remarkable transformation in healthcare delivery. Through strategic planning, embracing technology, empowering patients, promoting preventive healthcare, and fostering collaboration, the Kingdom is revolutionizing its healthcare sector. The vision encompasses an inclusive and patient-centered approach, ensuring that high- quality healthcare services are accessible to all citizens. As the journey progresses, Saudi Arabia is poised to become a global leader in healthcare, setting new benchmarks for excellence and innovation.

The present study sought to ascertain the level of parental satisfaction with the service quality provided at reputable children's care facilities in Taif, Saudi Arabia. The level of parental satisfaction as determined by the study's six domains of service quality was found to be higher than the results of the earlier study (Aljarallah *et al.*, 2023), which was conducted in Riyadh patients at tertiary care facilities. A high level of parental satisfaction regarding service quality at Taif Children's Hospital indicates that the hospital has successfully met the expectations and needs of parents. A patient-centered approach, effective communication, high-quality care, compassionate approach, accessibility, timeliness, involvement in decision-making, and a supportive environment are some of the key factors contributing to high levels of parental satisfaction as indicated by previous work (Haggerty *et al.*, 2013; Yildirim *et al.*, 2017; Gauvin *et al.*, 2017; Coyne *et al.*, 2018; De Brasi *et al.*, 2019; Kenner *et al.*, 2019) [44, 15, 22].

In terms of the factors associated with parents' satisfaction with the service quality, the current study showed that elderly age, single, divorce or widowed, lower educated parents without health literacy had lower levels of satisfaction than younger, married, more educated parents with health literacy, respectively.

In keeping with an earlier study, the current study found that elderly and less educated parents were less satisfied with the quality of health services given in the selected hospital. These results corroborate with Alemu *et al.* (2022) [2] and Fong *et al.* (2018) who found that a parent's sociodemographic characteristics such as parental age and level of education were associated with parental satisfaction; in their study, elderly and less educated parents were found to be less satisfied with care. Difference in expectations and preferences between different age and education categories may explain the difference in the levels of satisfaction (Marchiondo & Marchiondo, 2010) [33]. In addition, younger

parents with higher education levels are more likely to be aware and more responsive of the hospital's offerings than those with elderly age and lower education levels.

In congruent with previously published literature (e.g. Pilkauskas & Martinson (2015) <sup>[36]</sup>, the current study found an influence of marital status on parental satisfaction with the quality of health services given in the selected hospital. Marriage was being found to be a beneficial influence on parents' level of satisfaction with health care services. While marital status itself may not directly influence the satisfaction with health services, it can indirectly affect it through other factors such as social support, financial resources, and division of responsibilities. Married individuals often have a built-in support system provided by their spouse, which can positively impact their satisfaction with health services. Having a partner to share the responsibilities of parenting, including managing healthcare for children, can alleviate stress and enhance satisfaction. In addition, marital status can influence financial stability, and this can have implications for accessing and affording quality health services. Married couples may have more combined financial resources compared to single parents, which could enable them to seek out better healthcare options for their children, resulting in higher satisfaction levels. However, sharing parenting responsibilities between spouses in a marital relationship can provide a sense of relief and facilitate better coordination in managing healthcare needs. This may lead to greater satisfaction with health services, as both parents can contribute to decision-making, appointments, and follow-up care. Finally, being in a supportive marital relationship can positively impact emotional well-being, including parental satisfaction. When parents feel emotionally supported by their spouse, they may experience reduced stress and a greater sense of satisfaction with the quality of healthcare services received for their children.

The current study found that parental health literacy have a significant influence on satisfaction with the quality of health services. According to DeWalt and Hink (2009) <sup>[16]</sup>, parents with higher health literacy may be more engaged in their child's healthcare, leading to increased satisfaction with the service quality. It is important to note that low health literacy among parents can lead to misunderstandings, inadequate treatment adherence, and suboptimal healthcare experiences. Healthcare providers should strive to improve health literacy among parents by using plain language, providing clear instructions, and offering educational materials that are easy to understand. By addressing and improving parental health literacy, healthcare systems can enhance satisfaction with the quality of health services and ultimately improve health outcomes for children.

Although the current study found a difference between employed/self-employed and unemployed/retired parents on the level of satisfaction, it was not significant. This may be due to the fact that individual experiences and perspectives may vary significantly, and the impact of employment on parental satisfaction with health services can be complex and multifaceted. Time constraints, financial resources, stress and work-life balance, and employer benefits and support are some facets that may identify the impact of employment on the parental satisfaction with health services.

Finally, as this study utilized of one-point time of measurement, the responses may represent the context at that point in time, which may not be an accurate reflection of dynamic nature of the service quality state over time among

parents. In addition, the absence of a conceptual framework for parental satisfaction with health services represents another important limitation to the current study. A literature search provided no evidence of this framework (model) among parent's population.

## Conclusion

Parents play a critical role in determining when and where to access care for their children. Assessing parental satisfaction of the health system is particularly important in ensuring that healthcare organizations change towards more compliance and the achievement of improved health outcomes, especially in the care of children with different medical conditions.

As parental satisfaction with health services is an important issue in the care of children patients, close attention by the researchers and health care provider is needed in terms of its measurements and associated factors. This will allow the management of hospital or other medical institutions to provide accurate and effective interventions to address and improve the parental satisfaction in the contexts of some socio-demographic factors. These interventions based on continuous improvement of service quality may enable those parents to reach and maintain better satisfaction which in turns limiting their suffering during and after treatment. Finally, the authors hope and believe that the results of this study will provide the interested parties in Taif Children's Hospital with valuable information that help in prioritizing parental satisfaction as essential area for delivering patient-centered care and achieving better health outcomes for children.

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