



# The Open Nursing Journal

Content list available at: <https://opennursingjournal.com>



## RESEARCH ARTICLE

### Assessment of Parent and Nurse Perceptions of Parental Participation in Hospital Paediatric Care

Emad Shdaifat<sup>1\*</sup> , Abdallah M. Sudqi<sup>2</sup>, Firas T. Abusneineh<sup>2</sup> and Najla M. Al-Ansari<sup>3</sup>

<sup>1</sup>Department of Community Health Nursing, College of Nursing, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia

<sup>2</sup>Department of Fundamentals Nursing, College of Nursing, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia

<sup>3</sup>Department of Nursing, King Fahd Hospital of the University, Al-Khobar, Saudi Arabia

#### Abstract:

##### Background:

Parent and nurse perceptions about the care of hospitalized children have been examined in developed countries, but little is known in developing countries.

##### Objective:

The study aims to evaluate the perceptions of nurses and parents towards parental participation in care for hospitalized children and associated factors.

##### Methods:

A cross-sectional design was used to collect data from nurses and parents in paediatric units in the Eastern Region of Saudi Arabia using a convenience sampling technique. Data were collected using the Parent Participation Attitude Scale (PPAS), and the agreement and differences between groups were analysed.

##### Results:

The present results found that both parents and nurses agreed on 7 out of 20 statements regarding parental involvement in care for their children. Nurses in paediatric surgery had a higher perception of involving parents ( $P = 0.002$ ), while nurses in Well Baby Nursery (WBN) ward had the lowest perception. The present findings confirm that married caregivers had higher perceptions ( $P = 0.035$ ) than their single counterparts.

##### Conclusion:

Parent participation attitude was agreed on for seven statements between parents and nurses. More studies are required to explore the relationship between healthcare providers and parents with regard to parental participation in caring for hospitalized children.

**Keywords:** Parent, Nurses, Participation, Children, Hospitalized, Paediatric care.

#### Article History

Received: March 22, 2022

Revised: May 20, 2022

Accepted: June 15, 2022

## 1. INTRODUCTION

Parental Participation (PP) in parents' care for their hospitalized children has become a major issue in modern paediatric nursing [1]. Even though it is considered part of the extensively studied family-centred care concept [2]. Some researchers define PP as the active involvement in particular

levels of care based on approval and interactions with healthcare providers [3]. While others refer to it in terms of the involvement of parents in decisions about health services in their children's care [1]. Other scholars define it physical, psychological, or social activities performed by parents for a child in the hospital setting, whereby parents take part in the care of their child across the entire hospital episode [4].

Paediatric hospitalization can potentially negatively impact the psychological and physical well-being of child patients and their families. It can cause separation anxiety for the child

\* Address correspondence to this author at the Department of Community health nursing, College of Nursing, Imam Abdulrahman Bin Faisal University, P.O Box 1982, Dammam, Saudi Arabia; Tel: +966 13 333 1642; E-mail [ealshdaifat@iau.edu.sa](mailto:ealshdaifat@iau.edu.sa)

related to the new environment, increasing the child's need for parents as caregivers [5]. In addition, changes in parental roles may create a sense of anxiety in their child; several studies emphasise the important role of mothers in visiting or staying to help in caring for their children, thereby reducing child patient distress [2]. PP approach aims to deliver the best quality of care to children and their involved families [6]. Satisfying the needs of parents in hospital contexts may have positive impacts on the well-being of service users, with perceived 'proper' participation in childcare [2].

Parental involvement is clearly most significant in paediatric units, where children have great needs for their parents. Paediatric nurses should consider parents as partners in providing care for hospitalized children, particularly in allaying the potential anxiety and distress of child patients, which are commonly reported. However, nurses may experience difficulty in facilitating and coordinating parental involvement, and parents may be unclear about their appropriate role [7].

The importance of considering support to the parents of newly diagnosed or admitted children in order to sustain parents' participation in care has been suggested by many scholars, who emphasise that when healthcare professionals do not have a clear understanding of what parents' value, they hinder the possibility of an effective response to their needs, possibly contributing to the parents' distress and insecurity [2, 8]. In a study [9], parents stated that the reasons for staying with their children were to: provide individualized care to their children, such as feeding, changing napkins, and bathing; ensure adequate monitoring during hospitalization. alleviate the burden of hardworking nurses, alongside making sure their children receive necessary attention; and to meet the emotional needs of their children, as well as satisfying their own emotional needs [10].

Albert and Charkot [11] confirm that hospitalized children experience stressors involving fear and separation from parents, family, and friends. Parents likewise suffer from the same stressors, worrying about their child's health and emotional state, as well as coping with other personal and professional responsibilities, such as taking time off work and caring for other family members. Healthcare providers must understand that these responsibilities weigh heavily on parents' minds and remember to provide reassurance and simple explanations to ease their burdens. Studies showed that in order to have more positive attitudes toward PP, nurses should establish a good relationship with parents and actively engage with their feedback [12]. Additionally, nurses should be trained to communicate well with parents and understand cultural differences to establish and improve the concept of PP [13].

Arthun *et al.* [ 7 ] found that the majority of parents expected to participate in their children's care and to be included in all decisions, and some of them considered that the quality of care in the hospital was inherently inferior to that which they could deliver, whether at home or in hospital. They attributed this to the perception that nurses are too busy. Parents perceive that they can be more readily available to their children, especially when nurses are not around. Furthermore, some parents want to incorporate the children themselves in their care process and planning, especially when they are old

enough to understand the care process and make informed choices.

Clearly, the concept of PP in care is a lively and important issue for service users (child patients and their families), nurses, and researchers [8]. Levels of knowledge and attitudes among health professionals concerning parental involvement in healthcare remain rudimentary, and few studies have focused on this issue, which is generally mediated on an ad hoc basis in paediatric wards without formal facilitation or coordination (*e.g.*, in policies and guidelines). This study thus aims to evaluate the nurse and parent perceptions of parental involvement in care for hospitalized children and associated factors to generate preliminary insights into related phenomena, which can subsequently be developed by further research to tentatively give direction on how to effectively incorporate parental inputs into the paediatric care process, to improve the quality of care and patient satisfaction.

## 2. MATERIALS AND METHODS

### 2.1. Setting and Participants

A cross-sectional study was conducted at a university hospital in the Eastern Region of Saudi Arabia from May to October 2017 in paediatric units. Nurses and parents or guardians of hospitalized children were invited to participate by completing the questionnaires. A total of 73 nurses and 101 parents participated. In the study "parent participation" and "parent engagement" was used interchangeably to describe the involvement of parents and other family members in the inpatient care of their children.

### 2.2. Sampling and Sampling Criteria

All nurses involved in taking care of paediatric patients in paediatric units were candidates to answer the nurses' questionnaire. Parents and guardians of child patients in the same units were eligible to participate by answering the parents' questionnaire. All participants were aged 18 years old and over; 'child' patients were defined as patients in paediatric units under 18 years' old.

### 2.3. Instrument

The Parent Participation Attitude Scale (PPAS) was used to evaluate the perceptions of parents and nurses toward family participation in providing care for hospitalized kids. The PPAS scale was originally developed [14] and was extensively updated [15, 16]. The PPAS is a self-administered questionnaire comprising 24 items using a five-point Likert scale, with answers ranging from "Strongly Agree" to "Strongly Disagree". Each item was scored from 1 to 5, with higher scores indicating more supportive attitudes toward PP. Four items were removed, which asked about a death of a child. The Cronbach's alpha coefficient of the PPAS was 0.75 [17]. Permission to utilize the scale was obtained from the author of the scale.

### 2.4. Ethical Consideration

Ethical approval was obtained from the Institutional Review Board (IRB) at the Imam Abdulrahman Bin Faisal

University (IRB-2017-04-133) and in compliance with Helsinki Declaration. The goals and nature of the study were explained to the participants. The confidentiality of the participants' data was assured. Potential participants were informed that their participation would be voluntary, that they maintained the right to withdraw from the study at any point in time, and that refusal to participate or withdrawal would not affect the care they received or their statutory rights. A consent form was obtained from each participant.

**2.5. Data Collection**

The questionnaire was distributed to nurses during their working hours in the three different shifts, and the parent questionnaire was distributed to the parents during their residence with their children in the hospital. Nurses were expected to work 5 days a week, 8 hours per shift, according to the following timing: shift A (7am-3pm), shift B (3pm-11pm), and shift C (11pm-7am). The researchers answered any queries from participants during that time. The confidentiality of the data was guaranteed, and the autonomy of participants was explained.

**2.6. Data Analysis**

The data were stored and analyzed using SPSS version 22. Categorical variables were evaluated using frequency and percentage, and continuous variables were expressed in means and standard deviations. Two independent sample t-tests or Mann-Whitney U tests were used to test the differences between the two groups. One-way analysis of variance

(ANOVA) or Kruskal Wallis analysis of variance was used for comparing the difference among three or more groups. The correlations between continuing variables were assessed using Pearson or Spearman correlations. A P-value of less than 0.05 was considered statistically significant.

**3. RESULTS**

The Cronbach's alpha coefficients for the nurse and parent scales were .73 and .634, respectively. A total of 73 female nurses enrolled in this study, of whom 55 (75.3%) were married. The majority held BSc degrees (69.9%). The results showed that more than 46% of participants worked in NICU and PICU paediatric settings. The mean age of nurses was 37 years old, ranging from 26 to 59 years old, and the mean experience was 11.5 years, ranging from 1 to 33 years. Most nurses were non-Saudis (87.7%), and more than 50% were working in B-Shift (Table 1).

Table 2 presents the demographic characteristics of parents who accompanied their children during hospitalization. The total number of parent participants was 101. About 86% of the children's caregivers were mothers. Their mean age was 34 (SD = 7.90), ranging from 18 to 60. Most participants (91.1%) were married and unemployed (72.3%). In terms of the highest level of education, the majority reported secondary school level or more (80.2%), while 5% were illiterate.

As shown in Table 3, both parents and nurses agreed on the following statements on the importance of involving parents in the care of their hospitalized children:

**Table 1. Demographic characteristics of paediatric nurses (n=73).**

	Characteristics	Frequency	Percentage
<b>Gender</b>	Female	73	100.0
	Male	0	0.0
<b>Marital Status</b>	Single	18	24.7
	Married	55	75.3
<b>Education Level</b>	Diploma	22	30.1
	BSc	51	69.9
	Postgraduate	0	0.0
<b>Unit</b>	NICU	25	34.2
	PICU	9	12.3
	Paediatric Surgery	10	13.7
	Paediatric Medical	11	15.1
	WBN	9	12.3
	Other	9	12.3
<b>Duty</b>	Shift A	19	26.0
	Shift B	37	50.7
	Shift C	17	23.3
<b>Nationality</b>	Saudi	9	12.3
	Non-Saudi	64	87.7
	Mean (SD)	Minimum	Maximum
<b>Age</b>	37.0 (8.5)	26.0	59.0
<b>Experience</b>	11.5 (7.0)	1.0	33.0

**Table 2. Demographic characteristics of parents (n=101).**

Characteristics		Frequency	Percent
<b>Gender</b>	Female	101	100.0
<b>Marital Status</b>	Single	4	4.0
	Married	92	91.1
	Divorce /Widowed	5	5.0
<b>Working</b>	Working	28	27.7
	Not working	73	72.3
<b>Education level</b>	Illiterate	5	5.0
	G1-8	15	14.9
	G9-12	35	34.7
	Diploma	9	8.9
	BSc	37	36.6
<b>Relation</b>	Mother	87	86.1
	Grandmother	5	5.0
	Other	9	8.9
	Mean (SD)	Minimum	Maximum
<b>Age</b>	34.0 (7.90)	18.0	60.0

**Table 3. Differences between parental and nurse perceptions of parental involvement of PP for hospitalized children.**

Statements	Nurse	Parent	t-value	P value	Effect Size
	Mean (SD)	Mean (SD)			
• In procedures where the child needs to be restrained, such as giving injections, a parent can often carry out this function.	3.32 (1.08)	3.36 (1.19)	-0.24	0.814	-0.03
• Most parents are not aware of when it is good for them to be with their child and when it is not	2.64 (1.13)	2.56 (0.92)	0.49	0.623	0.08
• It is usually better for the health professional to explain a procedure to a child than to have the parent do the explaining after having been instructed by the health professional, even if the parent can fully understand the procedure.	2.67 (1.23)	2.50 (1.10)	0.94	0.35	0.15
• If it is not medically contraindicated, it is preferable for parents to feed their babies than it is for medical staff to do so [sig. 0.162].	4.16 (0.71)	4.00 (0.80)	1.4	0.162	0.21
• Children cope better with hospitalization when their parent(s) participate in their care.	4.10 (0.92)	4.29 (0.57)	-1.69	0.092	-0.26
• Generally, parents should not be allowed to accompany their children into the X-ray room after having observed the necessary precautions	3.08 (1.26)	3.44 (1.14)	-1.93	0.055	-0.30
• Health professionals should always give medication to children, even if the medication is one that a parent would normally give at home	2.44 (1.21)	2.11 (1.00)	1.96	0.052	0.30

1. If it is not medically contraindicated, it is preferable for parents to feed their babies than it is for medical staff to do so [sig. 0.162]. The effect size was 0.21, which is considered to be small. *Children cope better with hospitalization when their parent(s) participate in their care* [sig. 0.92]. The effect size was -0.26, which is considered a small effect size.

2. In procedures where the child needs to be restrained, such as giving injections, a parent can often carry out this function [sig. 0.841].

3. Generally, parents should not be allowed to accompany their children into the X-ray room after having observed the necessary precautions [sig. 0.055]. The effect size was -0.30, indicating a small-to-medium effect size.

4. It is usually better for the health professional to explain a procedure to a child than to have the parent do the explaining after having been instructed by the health professional, even if

the parent can fully understand the procedure [sig. 0.350].

5. Most parents are not aware of when it is good for them to be with their child and when it is not [sig. 0.623].

6. Health professionals should always give medication to children, even if the medication is one that a parent would normally give at home [sig. 0.52]. The effect size was 0.30, indicating a small-to-medium effect size.

The results show a significant relationship between the nurses' units and their perceptions of integrating parents in providing care for their children (P = 0.002). Other variables (age, experience, marital status, educational level, duty, and nationality) did not show any significant relationship with the perception of PP in care for hospitalized children (Table 4). The median of paediatric surgery (73.5) was higher than PICU (70.0), NICU (68.0), and Paediatric Medical (64.0) wards, while WBN had the lowest (62.0).

**Table 4. Demographic-related differences in paediatric nurses’ perceptions of PP for hospitalized children\*.**

Characteristics	r	Median	IQR	P value
Age ‡	0.097	-	-	0.413
Experience ‡	0.114	-	-	0.335
Marital Status*	Single	66.5	14.3	0.246
	Married	65.0	10.0	
Education Level*	Diploma	65.0	12.5	0.942
	BSc	66.0	9.0	
Unit**	Paediatric Surgery	73.5	11.0	0.002
	PICU	70.0	13.0	
	NICU	68.0	12.5	
	Paediatric Medical	64.0	3.0	
	WBN	62.0	1.0	
	Other	64.0	3.0	
Duty**	Shift A	67.0	14.0	0.380
	Shift B	65.0	11.0	
	Shift C	64.0	8.5	
Nationality*	Saudi	64.0	14.0	0.820
	Non-Saudi	66.0	10.8	

‡ Spearman's rho \* Mann Whitney u test \*\* Kruskal Wallis test IQR: Interquartile Range.

**Table 5. Demographic-related differences in parents’ perceptions of PP for hospitalized children.**

Characteristics	r	Mean (SD)	Sig. value	P value
Age	-0.061			0.545
Marital Status*	Single	64.5 (7.93)	3.47	0.035
	Married	70.8 (4.65)		
	Divorce /Widowed	71.0 (3.31)		
Working £	Working	69.9 (4.52)	1.38	0.169
	Not working	70.2 (4.94)		
Education level µ	Illiterate	71.6 (3.50)	1.74	0.148
	G1-8	67.7 (5.20)		
	G9-12	69.5 (4.91)		
	Diploma	70.8 (4.91)		
	BSc	71.4 (4.62)		
Relation	Mother	70.3 (4.94)	0.66	0.518
	Grandmother	69.2 (4.96)		
	Other	70.1 (4.85)		

\* one-way ANOVA: the Tukey HSD post hoc test with significance between (Single and Married, p=0.027)

£ independent t-test

µ one-way ANOVA

The results show a significant relationship between single and married parents (P value = 0.035). Post-hoc analysis revealed that married parents have more positive perceptions of parental involvement than single ones (P = 0.027), while other variables (age, employment, educational level, and relation) did not show any significant relationship (Table 5).

**4. DISCUSSION**

The study aimed to evaluate the perceptions of nurses and parents concerning the involvement of the latter in care for their hospitalized children and associated factors. The study found that both parents and nurses agreed on 7 out of 20 statements on the importance of involving parents in the care of their hospitalized children. Our results demonstrated that

paediatric surgery nurses had the most positive perceptions of parental involvement, while nurses in the WBN ward had the most negative perceptions. Other variables did not show any relationship with perceptions of PP in hospitalized children care. Moreover, married family caregivers had more positive perceptions than their single counterparts, while other variables did not show any relationship.

The study found that both parents and nurses agreed on the principle of the importance of PP for their children during hospitalization, but there was a lack of clarity on the degree to which the parental role should be exercised and what it should entail. Our study showed essentially positive attitudes toward the concept of PP in terms of parents helping to feed their hospitalized children, in line with other studies [18], which

noted the importance of parental input in activities of daily living, including the observation that the most common practices of mothers' participation include orally feeding their children, changing clothes, and accompanying the child in practices involving pain. Additionally, a few authors [19] reported that parents and nurses had similar perceptions of task allocation for hospitalized children.

This study found that children cope better with hospitalization when their parents participate in their care. This corroborates a randomized controlled trial [20], which demonstrated that PP in the care of hospitalized children increases parental satisfaction with healthcare and reduces the anxiety of both parents and children. Furthermore, Okunola *et al.* [21] stated that nurses and parents agree on the importance of involving parents actively in the planning of nursing care of patients, especially to explain changes expected in the child's condition and treatment journey and how to be helpful for the child.

Fereday *et al.* [22] claimed that parents like to do work in partnership with healthcare providers to meet their children's needs more comprehensively, but they do not always trust the healthcare system and feel that healthcare providers undervalue their contributions to care. Additionally, Albert and Charkot [23] declared that parental anxiety tends to spread quickly, with parents experiencing personal fear related to the ambiguity of procedures, time, consequences, or unclearness, which may compromise their ability to support their children. Avis and Reardon [24] explained that parents reported negative feelings and anxiety if there was no discussion or clarity over parents' participatory role in caring for their children, which increased their concerns. Some behaviours by nurses could inhibit PP in care, such as not asking family members if they were willing to participate in care, being authoritative rather than working in partnership, and not spending time with patients' families [25].

Our study found that parents will be helpful in restraining their child, consistent with other authors [26], who found that parents can support nurses in restraining or injection procedures, which was considered the limit of their helpfulness after filling consent forms. On the other hand, Riedrichsdorf and Goubert [27] were against using restraints due to the negative experiences, stress, and anxiety they engender, and parental participation in restraining their children further exacerbate these negative experiences for both child patients and parents themselves, particularly when not offered choices [28]. According to Salmani *et al.* [29], the majority of families prefer to be present while their children receive medication and undergo procedures because it helps to calm both the parents and the children. However, some nurses were against PP during certain procedures such as cannula insertion because they believe it has an adverse effect on the relationship between the healthcare provider and the service recipient.

Moreover, Bulut and Calik [30] did not support the idea of the presence of family during invasive procedures, as this would make the procedures more difficult for healthcare providers. This study found that participants did not think parents should accompany their children in the X-ray room, which was also the opinion of radiology specialists in the study of Albert and Charkot [11], who confirmed that in some cases,

PP agitated the experience for children. Conversely, Thukral [31] stated that since the radiology department is an uncommon and unfamiliar setting for children, they will develop more discomfort and anxiety in the absence of their parents, and from a technical perspective, better quality images can be obtained by parental involvement to support and help children.

Our study found that parents and nurses agreed that nurses should explain the medical procedures rather than delegating this to parents. Several studies supported this finding; Karlsson *et al.* [26] stated that child patients themselves are the central focus of paediatric healthcare, and their awareness can be supported by parents, who mediate the healthcare experience with the child service users. Well, Wiejaczka [32] stated that PP should be concise and focused on the child's basic needs, in simple, tangible facts that inspire parents to ask questions. The results of the current study affirmed this and noted that most parents are unaware of when it is good for them to be with their child and when it is not. According to Çamur, Seher, and Karabudak [20], the *Platt Report* (1959) stressed the importance of unlimited visits by parents and giving them the chance to accompany their children. It noted that healthcare providers should have the capability to understand their feelings and needs. However, despite over sixty years of acknowledgement of the importance of supporting parental needs and involvement in paediatric care, Alemdar *et al.* [33] found that 60% of nurses neglected holistic evaluation (citing extreme workload), and they believed that the presence of the parent could interfere with nursing care due to the perceived waste of time they would incur by explaining care to parents [25].

Our study found that nurses should give medication to children, even if the same medication is usually given by parents at home. This finding could be explained in terms of nurses viewing medication administration as their fundamental role, and they feel a moral and professional obligation to undertake this job rather than delegating it to parents, despite the potential positive impact of such delegation on the relationship between nurses and parents. Nurses are also wary of the potential for medication errors if parents are allowed to administer medications to their children in ward contexts [34]. However, some researchers have declared that involving families in medication administration will increase family compliance with medication administration and decrease errors in the process [35]. According to Harrison [34], nurses sometimes experience conflicting thoughts on their roles as patient advocates dealing directly with service users on an interpersonal level, with rapport and support, and their function as clinical experts, legally responsible for the care of the child. Consequently, they feel that the abilities of parents to administer more complex care should be assessed before allowing such practices in hospital contexts.

Despite the generally positive perceptions of and support for PP among nurses and other healthcare providers, there are still major obstacles to the implementation of this concept in practice. Parents are expectant and willing to participate in the care of their child, but the details of how and to what extent this can be facilitated remain unclear. Our results demonstrated that there is a relationship between the nurses' units and

perceptions of integrating parents in providing care for children. Kurtulus *et al.* [35] found that internal medicine had the highest score of PPAS compared with other clinics in perceptions of parental involvement. According to a study [36], the scores in specialist units such as cardiology or oncology indicated more positive attitudes toward parent participation than in general units.

Our results affirm the finding of Kucuk Alemdar *et al.* [33] that the percentage and the perception of nurses also vary with different units; surgical units have the most positive attitudes among all areas. The present findings confirmed that if family caregivers are married, they have more positive perceptions than their single counterparts, while other variables did not show any relationship with perceptions of PP in caring for hospitalized children.

According to Cimke and Mucuk [18], elderly mothers ( $\geq 36$  years old) and having higher educational levels were significant to family care. In a systematic review by Power and Franck [37], marital status was found to positively influence healthcare providers' attitudes toward PP. There is not enough research available to explain the relationship between marital status and perceptions of parental care.

## CONCLUSION

The present study was designed to determine the perceptions of nurses and parents toward PP in caring for hospitalized children and associated factors. The most obvious finding to emerge from this study is that parents and nurses agreed on 7 out of 20 statements regarding parent involvement in children's care. Nurses in paediatric surgery had the most positive perceptions of involving parents, while nurses in the WBN ward had the most negative perceptions. The present findings confirm that married caregivers have more positive perceptions than their single counterparts.

An implication of this is that understanding PP in healthcare for children will establish a good working relationship with nurses and reduce gaps between parents and nurses. Finally, a few important limitations need to be considered. First, the small number of nurses included in the study. Second is the absence of fathers because of the ethical issues involved in conducting research in Saudi Arabia. Finally, the cross-sectional design was used in this study. It is recommended that further research be undertaken to deepen the understanding of the relation between PP and healthcare provision for hospitalized children.

## LIST OF ABBREVIATIONS

PPAS	=	Parent Participation Attitude Scale
WBN	=	Well Baby Nursery
PP	=	Parental Participation

## CONSENT FOR PUBLICATION

Informed consent was obtained from all participants.

## STANDARDS OF REPORTING

STROBE guidelines were followed.

## AVAILABILITY OF DATA AND MATERIALS

The data and supportive information are available within the article.

## FUNDING

None.

## CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

## ACKNOWLEDGEMENTS

Declared none.

## REFERENCES

- [1] Aarthun A, Øymar KA, Akerjordet K. Parental involvement in decision-making about their child's health care at the hospital. *Nurs Open* 2019; 6(1): 50-8. [http://dx.doi.org/10.1002/nop2.180] [PMID: 30534394]
- [2] Melo EMOP, Ferreira PL, Lima RAG, Mello DF. The involvement of parents in the healthcare provided to hospitalized children. *Rev Lat Am Enfermagem* 2014; 22(3): 432-9. [http://dx.doi.org/10.1590/0104-1169.3308.2434] [PMID: 25029054]
- [3] Mol C, Argent AC, Morrow B. Parental satisfaction with the quality of care in a South African paediatric intensive care unit. *South Afr J Crit Care* 2018; 34(2): 51-8. [http://dx.doi.org/10.7196/SAJCC.2018.v34i2.366]
- [4] Abdelkader R, Khalaf I, Kridli S, Arabiat D, Alrimawi I. Parents Involvement in Child's Care in an Arab Pediatric Setting. *Health Sci J* 2016; 10(4): 1-6.
- [5] Rokach A. Psychological, emotional and physical experiences of hospitalized children. *Clin Case Rep* 2016; 2(4): 399-401. [http://dx.doi.org/10.15761/CRR.1000227]
- [6] Burns KEA, Misak C, Herridge M, Meade MO, Oczkowski S. Patient and family engagement in the ICU. Untapped opportunities and underrecognized challenges. *Am J Respir Crit Care Med* 2018; 198(3): 310-9. [http://dx.doi.org/10.1164/rccm.201710-2032CI] [PMID: 29624408]
- [7] Aarthun A, Øymar KA, Akerjordet K. How health professionals facilitate parents' involvement in decision-making at the hospital: A parental perspective. *J Child Health Care* 2018; 22(1): 108-21. [http://dx.doi.org/10.1177/1367493517744279] [PMID: 29212362]
- [8] Abdelkader R, Arabiat DH, Holmes SL, Hamdan-Mansour A. Socio-demographic correlates of parents' participation in care of a hospitalized child. *J Child Health Care* 2016; 20(3): 374-83. [http://dx.doi.org/10.1177/1367493515598650] [PMID: 26311486]
- [9] Sundal H, Vatne S. Parents' and nurses' ideal collaboration in treatment-centered and home-like care of hospitalized preschool children – a qualitative study. *BMC Nurs* 2020; 19(1): 48. [http://dx.doi.org/10.1186/s12912-020-00445-7] [PMID: 32536810]
- [10] Svendsen EJ, Pedersen R, Moen A, Bjørk IT. Exploring perspectives on restraint during medical procedures in paediatric care: a qualitative interview study with nurses and physicians. *Int J Qual Stud Health Well-being* 2017; 12(1): 1363623. [http://dx.doi.org/10.1080/17482631.2017.1363623] [PMID: 28889788]
- [11] Albert A, Charkot E. Pediatric imaging-Radiology Key 2016. <https://radiologykey.com/pediatric-imaging/>
- [12] Gómez-Cantarino S, García-Valdivieso I, Moncunill-Martínez E, Yáñez-Araque B, Ugarte Gurrutxaga MI. Developing a family-centered care model in the neonatal intensive care unit (NICU): A new vision to manage healthcare. *Int J Environ Res Public Health* 2020; 17(19): 7197. [http://dx.doi.org/10.3390/ijerph17197197] [PMID: 33019680]
- [13] Hall SL, Cross J, Selix NW, *et al.* Recommendations for enhancing psychosocial support of NICU parents through staff education and support. *J Perinatol* 2015; 35(S1)(Suppl. 1): S29-36. [http://dx.doi.org/10.1038/jp.2015.147] [PMID: 26597803]
- [14] Seidl FW, Pillitteri A. Development of an attitude scale on parent participation. *Nurs Res* 1967; 16(1): 71-3.

- [PMID: 5180797]
- [15] Gill KM. Nurses' attitudes toward parent participation: Personal and professional characteristics. *Child Health Care* 1987; 15(3): 149-51. [http://dx.doi.org/10.1080/02739618709514761] [PMID: 10280034]
- [16] Gill KM. Health professionals' attitudes toward parent participation in hospitalized children's care. *Child Health Care* 1993; 22(4): 257-71. [http://dx.doi.org/10.1207/s15326888chc2204\_2] [PMID: 10130538]
- [17] Daneman S, Macaluso J, Guzzetta CE. Healthcare providers' attitudes toward parent participation in the care of the hospitalized child. *J Spec Pediatr Nurs* 2003; 8(3): 90-8. [http://dx.doi.org/10.1111/j.1088-145X.2003.00090.x] [PMID: 12942887]
- [18] Cimke S, Mucuk S. Mothers' Participation in the Hospitalized Children's Care and their Satisfaction. *Int J Caring* 2017; 10(3): 1643-51.
- [19] Stuart M, Melling S. Understanding nurses' and parents' perceptions of family-centred care. *Nurs Child Young People* 2014; 26(7): 16-21. [http://dx.doi.org/10.7748/ncyp.26.7.16.e479] [PMID: 25200238]
- [20] Çamur Z, Karabudak S. The effect of parental participation in the care of hospitalized children on parent satisfaction and parent and child anxiety: Randomized controlled trial. 2020; 27(5): e12910.
- [21] Okunola I, Olaogun A, Adereti S, Bankole A, Oyibocho E, Ajao O. Paediatric parents and nurses perception of family - centered nursing care in southwest nigeria. *Int J Caring Sci* 2017; 10(1): 67-75.
- [22] Fereday J, Oster C, Darbyshire P. Partnership in practice: what parents of a disabled child want from a generic health professional in Australia. *Health Soc Care Community* 2010; 18(6): 624-32. [http://dx.doi.org/10.1111/j.1365-2524.2010.00935.x] [PMID: 20561077]
- [23] Avis M, Reardon R. Understanding the views of parents of children with special needs about the nursing care their child receives when in hospital: a qualitative study. *J Child Health Care* 2008; 12(1): 7-17. [http://dx.doi.org/10.1177/1367493507085615] [PMID: 18287181]
- [24] Berti D, Ferdinande P, Moons P. Beliefs and attitudes of intensive care nurses toward visits and open visiting policy. *Intensive Care Med* 2007; 33(6): 1060-5. [http://dx.doi.org/10.1007/s00134-007-0599-x] [PMID: 17384930]
- [25] Karlsson K, Rydström I, Enskär K, Dalheim Englund A-C. Nurses' perspectives on supporting children during needle-related medical procedures. *Int J Qual Stud Health Well-being* 2014; 9(1): 23063. [http://dx.doi.org/10.3402/qhw.v9.23063] [PMID: 24646473]
- [26] Friedrichsdorf SJ, Goubert L. Pediatric pain treatment and prevention for hospitalized children. *Pain Rep* 2020; 5(1): e804. [http://dx.doi.org/10.1097/PR9.0000000000000804] [PMID: 32072099]
- [27] Brenner M, Parahoo K, Taggart L. Restraint in children's nursing: Addressing the distress. *Journal of Children's and Young People's Nursing* 2007; 1(4): 159-62. [http://dx.doi.org/10.12968/jcyn.2007.1.4.24406]
- [28] Salmani N, Hasanvand S, Bagheri I, Mandegari Z. Nursing care behaviors perceived by parents of hospitalized children: A qualitative study. *Int J Pediatr* 2017; 5(7): 5379-89.
- [29] Bulut HK, Calik KY. Doctors and nurses' views on the participation of parents in invasive procedures of hospitalized children. *J Pak Med Assoc* 2020; 70(2): 231-5. [PMID: 32063612]
- [30] Thukral BB. Problems and preferences in pediatric imaging. *Indian J Radiol Imaging* 2015; 25(4): 359-64. [http://dx.doi.org/10.4103/0971-3026.169466] [PMID: 26752721]
- [31] Wiejaczka K. Nursing Care of Pediatric Patients by Stage of Development 2021. <https://nursingcentral.com/lessons/caring-for-pediatric-patients-developmentally-appropriate-interventions-and-techniques>
- [32] Kucuk D, Kardas F, Polat S. Opinions of nurses working in NICU about family centered care 2018; 7(1): 93-6.
- [33] Harrison TM. Family-centered pediatric nursing care: state of the science. *J Pediatr Nurs* 2010; 25(5): 335-43. [http://dx.doi.org/10.1016/j.pedn.2009.01.006] [PMID: 20816555]
- [34] Abu-Shaheen A, Nofal A, Heena H. Parental perceptions and practices toward childhood asthma. *Biomed Res Int* 2016; 1-7. [http://dx.doi.org/10.1155/2016/6364194]
- [35] Kurtulus N, Yıldız K, Korucu E, Ozyazicioglu N. Determination of pediatric nurses' attitudes on family-centered care. *Int J Caring Sci* 2018; 11(2): 1065-72.
- [36] Cranley LA, Lam SC, Brennenstuhl S, *et al.* Nurses' attitudes toward the importance of families in nursing care: A multinational comparative study 2022; 28(1): 69-82.
- [37] Power N, Franck L. Parent participation in the care of hospitalized children: a systematic review. *J Adv Nurs* 2008; 62(6): 622-41. [http://dx.doi.org/10.1111/j.1365-2648.2008.04643.x] [PMID: 18503645]