

Assessment of health care providers' and parents satisfaction about care decisions and care provided to the patients admitted in Pediatric Intensive Care Unit: A descriptive study

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Received - 25 February 2018

Initial Review - 18 March 2018

Published Online - 19 April 2018

ABSTRACT

Background: Hospitalisation is a stressful situation especially for children. Health care providers (HCPs) play an important role in caring for the sick children. Objective: To assess the health care providers' collaboration and satisfaction about care decisions and parents' satisfaction about care provided to the patients admitted in Pediatric Intensive Care Unit. **Materials and Methods:** This was a descriptive study conducted among 32 HCPs working in PICU and 50 parents of children admitted to the PICU of a tertiary care teaching and referral hospital in India. The subjects were selected by total enumeration sampling method. Information profile details and data related to parental satisfaction were gathered using a structured interview schedule. Data related to HCPs' collaboration and satisfaction about care decisions were gathered using a structured questionnaire. The data were analyzed using SPSS (Version 20.0). **Results:** Majority of the parents were highly satisfied (92%) with the care provided by the HCPs. More than two-third (87.5%) of the HCPs were highly satisfied with the collaboration among them related to care decisions. **Conclusion:** Majority of the parents of children admitted to PICU, were highly satisfied with the care provided to their children. Furthermore, most HCPs showed a high level of collaboration among themselves and were satisfied with the care decisions related to the PICU children.

Key words: Collaboration and satisfaction, Health-care providers, Parental satisfaction

Parents are both physiological and psychological pillars of support for a child. Parents experience anxiety, fear, disappointment, and guilt once their child gets hospitalized. In addition, they experience lack of confidence and competence in taking care of their child in unfamiliar hospital surroundings [1]. A team approach is required for safe and satisfactory treatment of the child to allay the stress on the parents. Hospitalization is a stressful experience; health-care providers (HCPs) play an important role in caring for sick children and act as a bridge between parents and the patients. Health team members are required to promote and provide a safe and supportive environment to reduce stress and promote satisfaction among child and parents. In addition to that better communication and collaboration among HCPs improve patient outcomes and ensure greater satisfaction among parents. Collaboration in the health care is defined as "health-care professionals assuming complementary roles and working together in a cooperative manner, sharing responsibilities among each other for problem-solving, decision-making, and to carry out various plans for patient care [2,3]." Collaboration among HCPs increases their awareness of each other's knowledge and skills

that lead to continuous improvement in decision-making for the patient care [4]. Thus, an improved teamwork can substantially improve quality of services. Keeping in view the importance of collaboration of team and its role in parent satisfaction, the current study was conducted to assess two aspects; the HCPs' collaboration and satisfaction about care decisions related to care provided to the admitted patients and parents' satisfaction about care provided to the patients admitted in pediatric intensive care unit (PICU).

METHODOLOGY

A descriptive study design was used to assess the HCPs' collaboration and satisfaction about care decisions and parents' satisfaction about care provided to the children admitted in PICU. The population chosen for study was HCPs working in PICU and parents of children admitted in PICU.

32 HCPs and 50 parents were selected by total enumeration sampling method. The tool used for assessing satisfaction of parents related to care given by the HCPs was a self-developed structured interview schedule which consisted of two parts:

Part A: Sociodemographic data of children and parents and Part B: Questions to assess parental satisfaction which consisted of 25 statements regarding issues affecting the level of satisfaction among parents related to care provided to their child.

The tool used for assessing collaboration and satisfaction about care decisions among HCPs was a self-developed structured questionnaire which consisted of two parts: Part A: Sociodemographic data of HCPs and Part B: Questions to assess collaboration and satisfaction which consisted of 12 statements regarding satisfaction and collaboration among HCPs working in PICU. The tools were validated by five experts in the field of nursing. The content validity index for tool 1 (self-developed tool for parent satisfaction) and tool 2 (self-developed tool for collaboration and satisfaction among HCPs) was 0.925 and 0.843, respectively, the reliability as calculated by Cronbach's alpha came out to be 0.875.

The data collection was done over 1 week by five investigators. An informed written consent was taken by the study participants before collecting the data. The purpose and need of the study was explained to the study subjects and confidentiality of their data was ensured. The study was approved by institutional ethical committee. Data were coded and analyzed using SPSS-20 version.

RESULTS

Sociodemographic Profile of the HCPs

Among 32 HCPs, 21 (62.5%) were females. As per the age, 21 (62.5%) of participants were lying in the age group of 21–30 years and mean (\pm standard deviation [SD]) age was 30.47 ± 6.263 years. In relation to clinical experience, 14 (43.8%) of participants had clinical experience of 0–3 years and only 1 (3.1%) had experience of 13–15 years and 22–24 years, respectively. Equal number of doctors and nurses participated in the study (Table 1).

Sociodemographic Profile of the Parents of Children Admitted in PICU

More than half, 27 (54%) of the parents were in the age group of 21–30 years. Mean (\pm SD) age was 30.54 ± 5.023 years. With respect to the relation with child, 26 (52%) of participants were fathers. With respect to occupation, 20 (40%) of mothers were homemakers. One-fifth (20%) of the participants were illiterate, and only 6 (12%) were graduates or above (Table 2).

Sociodemographic Profile of Children Admitted in Pediatrics ICU

Of 31 children whose parents were interviewed, two-third 19 (61.3%) were boys and half 15 (48.4%) of the children were under the age group of 0–1 year and only 1 (3.2%) had age between 12 and 13 years. More than half, 20 (64.5%) of the subjects had a PICU stay of 1–5 days and only 1 (3.2%) child stayed for 21–25 days (Table 3).

Table 1: Sociodemographic profile of the HCPs (n=32)

| Sociodemographic characteristics | Frequency (%) |
|----------------------------------|---------------|
| Gender | |
| Male | 11 (34.4) |
| Female | 21 (65.6) |
| Age (years) | |
| 21–30 | 21 (62.5) |
| 31–40 | 9 (28.1) |
| 41–50 | 3 (9.4) |
| Clinical experience (years) | |
| 0–3 | 14 (43.8) |
| 4–6 | 4 (12.5) |
| 7–9 | 8 (25) |
| 10–12 | 2 (6.3) |
| 13–15 | 1 (3.1) |
| 16–18 | 2 (6.3) |
| 22–24 | 1 (3.1) |
| Current position | |
| Junior residents | 9 (28.1) |
| Senior residents | 7 (21.9) |
| Nursing officers | 12 (37.5) |
| Senior nursing officers | 4 (12.5) |

HCPs: Health-care providers

Table 2: Sociodemographic profile of parents of children admitted in PICU (n=50)

| Sociodemographic characteristics of parents | Frequency (%) |
|---|---------------|
| Age (years) | |
| 21–30 | 27 (54) |
| 31–40 | 22 (44) |
| 41–50 | 1 (2) |
| Relation | |
| Father | 26 (52) |
| Mother | 24 (48) |
| Occupation | |
| Housewife | 20 (40) |
| Government job | 3 (6) |
| Private job | 8 (16) |
| Others | 19 (38) |
| Educational qualification | |
| Illiterate | 10 (20) |
| Up to primary | 24 (48) |
| Up to secondary | 10 (20) |
| Graduates and above | 6 (12) |

PICU: Pediatric intensive care unit

Satisfaction Level of Parents of Children Admitted in PICU with the Care Provided by the HCPs

Majority of 46 (92%) of the subjects with a mean ± SD of 115.24 ± 7.545 were highly satisfied (score 101–125) while 4 (8%) of the parents with a mean ± SD of 98.75 ± 1.50 were satisfied (score 75–100) with the care provided to the child.

The Collaboration and Satisfaction Levels Experienced by the HCPs Related to the Care Provided to the Children Admitted in PICU

Majority 28 (87.5%) of the subjects with a mean ± SD of 49.82 ± 3.782 were highly satisfied (score 41–60) and 4 (12.5%) of the subjects with a mean ± SD of 34.5 ± 5.45 were just satisfied (score 21–40).

Table 4 summarizes the association between the collaboration and satisfaction of HCPs and satisfaction of parents related to care provided to the children admitted in PICU. There was a statistically significant association between collaboration and satisfaction of HCPs and satisfaction of parents ($\chi^2 (1) \geq 14.933$, $p=0.000$).

A Pearson product-moment correlation was run to determine the relationship between collaboration and satisfaction of HCPs and satisfaction of parents, which was statistically significant ($r=0.683$, $p<0.001$). This shows that there is a positive correlation between collaboration and satisfaction of HCPs and satisfaction of parents related to care provided to the children admitted in PICU.

Table 3: Sociodemographic profile of children admitted in PICU (n=31)

| Sociodemographic characteristics of children | Frequency (%) |
|--|---------------|
| Gender | |
| Male | 19 (61.3) |
| Female | 12 (38.7) |
| Age (years) | |
| <1 | 15 (48.4) |
| 1–5 | 11 (35.4) |
| 5–10 | 4 (13) |
| >10 | 1 (3.2) |
| Duration of stay (days) | |
| 1–10 | 23 (74.2) |
| 11–20 | 6 (19.4) |
| >20 | 2 (6.4) |

PICU: Pediatric intensive care unit

Table 4: Association between the collaboration and satisfaction of HCPs and satisfaction of parents related to care provided to the children admitted in PICU

| Satisfaction of parents related to care provided to their children | Collaboration and satisfaction of the HCPs related to care decisions | | | | |
|--|--|-----------|----------|----|-------|
| | Highly satisfied | Satisfied | χ^2 | Df | p |
| Highly satisfied | 28 | 2 | 14.933 | 1 | 0.000 |
| Satisfied | 0 | 2 | | | |

Yates correction applied. HCPs: Health-care providers, PICU: Pediatric intensive care unit

DISCUSSION

This study aimed to assess the HCPs collaboration and satisfaction about care decisions and parents’ satisfaction about care provided to their children admitted in PICU. Children with various problems arising out of the disease, for which they are admitted, require multiple medical and surgical interventions that lead to longer hospital stay and uncertainty about the future quality of life. Delay in establishing a definitive diagnosis of disease condition may increase parental insecurity. This stage is likely to be a more stressful situation for the parents. Greater the level of disability in children, greater is the level of stress among parents. Parents of children suffering from illness are most liable to suffer from many psychological and physical problems. Hence, effective collaboration among HCPs leads to better satisfaction among parents.

As hospitalization is a stressful experience, the team approach is required for satisfactory treatment of the child. Thus, HCPs should be aware of child’s needs and communicate it to the other team members so as to promote a supportive environment to reduce the anxiety of child as well as parents leading to overall coping. A recent study revealed that if the line of communication was open and the information is freely shared between parents and HCPs, the parents had a better understanding of treatment [5]. A study on parental involvement and satisfaction conducted in Canada on 103 parents suggested that those parents, who were actively involved in decision-making and had good interaction with HCPs, had a greater level of satisfaction [6]. Similarly, the present study revealed that more than one-third of parents (46%) agreed that the HCPs inform them about their child’s condition which contributes to their satisfaction related to care of their child. In the present study, the HCPs agreed that collaboration among themselves was as high as 87.5% with a mean ± SD of 49.82 ± 3.782 with a total possible scoring of 60. The results were in line with the study conducted in various medical, surgical, and emergency areas including PICU by Michelle R. Troseth, R.N. in the year 1997 which revealed a range of mean scores of 30.7–35.5 with a total possible scoring of 54 for nurses’ perception of nurse-doctor collaboration and the range of mean scores of 34.6–45.9 with a total possible scoring of 60 for doctors’ perception of nurse-doctor collaboration [7]. In another descriptive study to assess nurse-physician collaboration, the results showed that most nurses and physicians achieve equal levels of assertiveness and cooperativeness or high levels of one dimension, but higher levels were not recorded on both dimensions resulting in collaboration [8]. On the other hand, the present study showed that more than half (59.4%) of the HCPs

strongly agree that health team members coordinate in decision-making process. The present study showed that more than one half of HCPs 18 (56.3%) agreed that open communication existed between HCPs, this brings better collaboration and in return satisfaction. Similarly, another study in context to communication revealed that higher is the communication between HCPs higher is the satisfaction levels [9].

The present study showed that 18 (36%) of the parents agree that HCPs inform them regarding the child's planned procedures and this contributed to the increased level of satisfaction related to care provided to their child. It was revealed that three-fourth 44 (88%) of the sample population of parents agreed that they are informed about their child's condition by HCPs in PICU. Around 47 (94%) of parents agreed that information provided to them by doctors and nurses coincide with each other. Around three-fourth of the subjects agreed that HCPs in PICU answer to their queries related to their child's planned tests, procedures, results, and prognosis of their child. Thus, majority 46 (92%) of the parents strongly agree that they are very satisfied with the care their child has received in PICU. The results of the current study are congruent to the results of an another study to assess the level of satisfaction among parents of children having congenital heart defects conducted in pediatric clinic of district general hospital of the United Kingdom on approximately 1200 children using a 12 question survey which showed that the level of acceptance was significantly higher in majority of parents (67%). There was a significant level of acceptance for services with all the participants with either very satisfied (67%) or satisfied (33%) response. Majority of parents were completely satisfied with the medical services and felt nothing more needed to be added [10]. The current study revealed that more than half of the parents (64%) strongly agree that health team members educate them regarding how to care for the child at home. Results have revealed that parents were happy and confident that their child was not ignored. They were grateful and satisfied that they themselves were able to participate in the care of their child. This helped them to cope better with their child's illness [11]. The study revealed that greater the communication among the HCPs related to the care of admitted children and related decisions, the greater was the satisfaction level. Furthermore, the same applies to the parental satisfaction; more their involvement in the care of their children and more open the communication their satisfaction was more.

Limitation of this study was the small sample size due to the limited study period. It is recommended that there should be open communication between HCPs and parents that would help in

planning better care and treatment for the child. There should be greater collaboration among HCPs as this leads to effective care and a greater level of satisfaction among parents. The study can be replicated at a larger level or for a large number of subjects to further validate these findings.

CONCLUSION

In PICU greater is the collaboration and satisfaction among the HCPs related to the child care decisions higher will the the level of satisfaction among parents. This is related to the fact that collaboration and satisfaction among the HCPs ensures the best care to child and improved communication with parents. The nurses and physician would work in team, both will provide same information to parents, and nurses would be more informed about the needs of child.

REFERENCES

1. Parul D. Text Book of Pediatric Nursing. 2nd ed. India: Jaypee Brothers Medical Publishers (p) Ltd.; 2009. p. 528-30.
2. Fagin CM. Collaboration between nurses and physicians: No longer a choice. *Nurs Healthc* 1992;13:354-62.
3. Baggs JG, Schnuiti MH. Collaboration between nurses and physicians. *Image* 1988;20:145-9.
4. Christensen C, Larson JR. Collaborative medical decision making. *Med Decis Making* 1993;13:339-46.
5. Victoria SK. Parental Satisfaction in a Pediatric Intensive Care Unit. 2003. p. 3.
6. Shields HZ. Family centered care for hospitalized children. *JBL Libr Syst Rev* 2012;10:3917-25.
7. Michelle RT. Nurse-Physician Collaboration and Nurse Satisfaction. Master These; 1997. p. 448.
8. Jones RA. Nurse-physician collaboration: A descriptive study. *Holistic Nurs Pract* 1994;8:38-53.
9. Dingley RN. Department of Nursing Quality, Outcomes, Research, Evidence Based Practice. Bannock: Denver Health Medical Center; 2006.
10. Lee A. A satisfaction survey for congenital defect in infants. *J Pediatr Surg Nurs* 2004;49:780-2.
11. Conner J, Nelson E. Neonatal intensive care-satisfaction measured from parent perspective. *Pediatrics* 1999;18:103-7.

Funding: None; Conflict of Interest: None Stated.

How to cite this article: Kaur A, Kaur H, Kumari N, Kumari R, Rani S, Kalyan G, Muralidharan J, Ghai S. Assessment of health care providers' and parents satisfaction about care decisions and care provided to the patients admitted in Pediatric Intensive Care Unit: A descriptive study. *Indian J Child Health*. 2018; 5(3):157-160.

Doi: 10.32677/IJCH.2018.v05.i03.003