Original Research

The Effect of Family-Centered Empowerment Training on The Perception of Family-Centered Care by Parents of Hospitalized Children

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Abstract:

Background: Hospitalization of children is considered a stressful event for parents, and its unfortunate consequences include anxiety, stress and increased burden of care in parents. Considering the importance of family-centered training in empowering parents of hospitalized children, this study was conducted with the aim examining the effect of family-centered empowerment training on the understanding of family-centered care by parents of hospitalized children.

Methods: This semi-experimental study was conducted on 30 parents whose children had been hospitalized in Tehran Medical Center. The participants were selected by non-random sampling method, before being divided into two intervention and control groups. The data collection tool was the questionnaire of family-centered care perception. Samples in the intervention group received 5 training sessions (30-45 minutes) of family-centered care. Data in both groups was collected and entered into SPSS-21 statistical software to be analyzed by descriptive statistics (table, mean, standard deviation) and inferential statistics (paired t-test, independent t-test, Fisher's exact test and chi-square test) at the significance level of 0.05.

Results: The paired t-test in the control group before and after the intervention did not show any significant difference between the mean scores of family-centered care perception and its dimensions ($P=0.72$). However, it showed a significant difference between the mean scores of these variables in the intervention group before and after the intervention ($P < 0.01$). Also, the independent t-test showed a significant difference between the two groups in this regard after the intervention.

Discussion: The results of this study showed that family-centered empowerment training increases the understanding of family-centered care by parents of hospitalized children. Therefore, considering the importance, low cost and effectiveness of family-centered training, this care model can be used to improve the quality of nursing care and increase the participation of parents in the care of their hospitalized children.

Keywords: Education, Family-Centered Empowerment, Perception of Care, Family-Centered Care, Parents, Hospitalized Children

Submitted: 14 Sep 2024 Revised: 13 Oct 2024 Accepted: 25 Nov 2024

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Introduction

About 30% of children have a history of hospitalization at least once, and 5% of them get hospitalized several times during their childhood (1). Hospitalization of children is considered a very stressful experience for parents (2). The process of admitting children to hospital causes anxiety in their parents (3), and is considered a crisis (4) and a threat by them (5). Anxiety is one of the complications of children's hospitalization in parents (6). Factors that affect anxiety in parents of hospitalized children include uncertainty of children's condition, unfavorable prognosis of the disease, and conflict between work and children's need (1). Often, the stress caused by hospitalization of children increases the burden of care in parents (7), and this decreases the quality of life in parents, especially the mothers of hospitalized children (8). On the other hand, parental support during the children hospitalization increases the quality of life in children and their parents (2). Education increases the parents' perception and corrects their attitude towards child care. Family-centered training also increases the comfort and reduces the anxiety and stress of parents (9, 10). Studies show that parents' empowerment increases their quality of life (11). In the meantime, the provision of nursing services and the use of care models lead to the correct recognition of patient's problems, and increase their motivation and involvement in solving these problems (12). Therefore, it can be said that care models increase the quality of care (13). In general, family empowerment training models can strengthen family unit, improve patient's health and prevent diseases and complications (12), because patient-centered and family-centered approaches in care provide a framework for healthcare workers, which in turn improve patient's health outcome and have a positive effect on the experiences of patients and families. This type of care also increases professional satisfaction in the employees, and as a result reduces health care costs and facilitates better use of health care resources (14). Researchers believe that family-centered care changes the attitude of staffs and patients, and also increases the quality of care, so by holding continuous training courses and modifying guidelines related to the provision of healthcare services to children, we can increase the family participation in care and improve conditions for the implementation of patient-centered and family-centered care (15-17). Since the use of nursing theory improves the quality of nursing care (13, 18, 19), this study was conducted with the aim of examining the effect of family-centered empowerment training on the perception of family-centered care by parents of hospitalized children.

Method

This semi-experimental study was conducted on 60 people who had been selected by non-random sampling method and divided into two intervention and control groups. Inclusion criteria for participant in the study were; being a parent of a hospitalized child with a diagnosis of chronic disease, having the ability to communicate visually and verbally, being aware of time and place, and having no chronic mental illness. Exclusion criteria included unwillingness to participate in the study. The sample size of this study was calculated to be 52 people (n=27 in each group) based on the study of Timuri et al. (2014) with an effect size of 1.85, a confidence interval of 95% and a significance level of 0.05 (21). However, after taking into account the possibility of 10% sample drop, the researcher selected 30 people in each group. The study environment was the gastroenterology department of Tehran Medical Center, where the researcher collected the samples.

Data collection tools included a demographic information questionnaire (age, gender, education, work experience, child's gender, child's age) and the questionnaire of family-centered care perception. This questionnaire

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has 21 items and three subscales of respect (items 1 to 6), cooperation (items 7 to 16) and support (items 17 to 21). This questionnaire is based on 4-point Likert scale, ranging from always (score 4) to never (score 1), with the higher score indicating a greater perception of family-centered care (20). The face and content validity of this questionnaire was confirmed by 10 faculty members of Tehran University of Medical Sciences. Vasli (2018) translated this questionnaire into Farsi, conducted a psychometrical evaluation on it, and calculated its Cronbach's alpha (0.79), (21). This study was approved by Tehran University of Medical Sciences with the registration number: IR.TUMS.FNM.REC.1400.114 and clinical trial code: IRCT20181004041229N1. The study objectives and method were explained to the children's parents, and they were ensured that their personal information would remain confidential and anonymous. They were also informed that they can leave the study at any time without any consequences, and then an informed consent was obtained from them. The participants were selected by non-random sampling method before being divided into two intervention and control group. Samples in the intervention group received 5 sessions (40-60 minutes each) of family-centered empowerment training over a month period. The content of family-centered empowerment training was designed and implemented based on books and various scientific resources under the supervision of relevant experts (23, 24). To achieve study objectives, the family-centered empowerment training was implemented in four sessions. The first session was held to increase the participants' knowledge on anatomy, physiology and causes of the disease, which was done through group discussions and educational booklets in groups of 3-4 people (4 groups). The second session was conducted with the aim of improving the parents' self-efficacy and stress-anxiety control skills. The third session was carried out to increase the parents' self-confidence and motivate them to participate in nursing care. The fourth session was held with the aim of evaluating the activities. The evaluation was done in two stages of process evaluation and final evaluation. The purpose of process evaluation is to encourage patients to internalize their control axis. Process evaluation is carried out throughout the implementation of intervention, where patient and active member of his family are evaluated during the intervention (20). The fifth session was conducted with the aim of evaluating the effectiveness of training and conducting the post-test. Samples in the control group received the routine care and training of the department. The questionnaires were completed in both groups in about 10-15 minutes. At the time of completing the questionnaire, the researcher was present and answered the samples' questions and uncertainties. Finally, the information was entered into SPSS-21 statistical software to be analyzed by descriptive statistics (table, mean, standard deviation) and inferential statistics (paired t-test, independent t-test, Chi-square test, Fisher's exact test, and covariance test). Statistical analysis was done at a significance level of 0.05.

Results

The mean age of samples in the intervention group was 35.3 + 066 years and in the control group was 4.52 + 35.12 years. Independent t-test did not show a significant difference in terms of age between the two groups (P = 0.9). Fisher's exact test also showed no significant difference between the intervention and control groups in terms of occupation. p=0.18), education (P=0.7) and income level (P=0.52).

Result of independent t-test before the intervention showed no significant difference between the two groups in term of the mean score of respect (P=0.8), but it showed a significant difference between the two groups in term of the mean scores of other dimensions of care perception (Table 1). Independent t-test

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after the intervention showed a significant difference between the two groups in terms of the mean scores of all dimension of family-centered care perception (Table 2). According to the results, the effect size was greater in the intervention group. Result of paired t-test in the control group before and after the intervention did not show any significant difference between the mean scores of family-centered care perception and all its dimensions (P=0.72), however it showed a significant difference in the intervention group before and after the intervention in term of these variables (P<0.01).

Discussion

The results of this study showed that family-centered empowerment training has a positive effect on the perception of family-centered care by parents of hospitalized children. Family-based empowerment training increases the perception of family-centered care. Meanwhile, studies show that education and interactive activities are among important factors in improving the level of knowledge and awareness (22). Emotional support of parents increases their understanding of the disease and empowers them in caring for their children (23). According to Koker's (2023) study, understanding of children's illness increases parents' quality of life (24). Fadda (2017) argued that family-centered empowerment training increases parents' understanding and knowledge of self-care process (25). Ramirez-Zamora (2020) stated that empowerment training plays a significant role in patient rehabilitation and improvement of care quality (26). Khanjari (2019) showed that family-centered care training increases the quality of life in patients of hospitalized children (11). Daie (2023) believed that family-centered care empowers the mothers of hospitalized children (12). Minooei (2016) in a study showed that family-centered model has a positive effect on improving the quality of parents' life and reducing life stressors (27). Vasli (2023) showed that family-centered empowerment model leads to self-management and empowerment of hemodialysis patients and their caregivers (28). Hammersen (2021) argued that family-centered spiritual and social support improves quality of life in parents of hospitalized children (29). Family-centered care is a care model that increases knowledge and understanding of parents of hospitalized children, and promotes preventive behaviors in them (30). A reduction in the anxiety of parents of hospitalized children affects children's recovery and increases parents' empowerment (6). Shoghi and colleagues conducted a study with the aim of investigating the effect of family-centered empowerment model on mothers of children with cancer, and showed that by empowering mothers in taking care of their children, we can reduce care pressure in them, which ultimately increases their understanding of existing situation and facilitates children's recovery (31). Mueller and colleagues in line with Mohammad and colleagues showed that caregivers of patients who had more contact with the treatment staff, reported a lower level of care pressure (32). Studies show that patient-centered and family-centered care because parents to become experts in child care during hospitalization and acquire competence in care after discharge. This type of care also empowers them in maintaining family relationships, increases their satisfaction and improves their psychological status (33). Family-centered training models are practical and effective in nursing care system (28). In general, it can be concluded that by implementing patient-centered and family-centered care, which take into account the opinions of patients and their families, we can increase the participation of patients and families in the care and treatment process, as well as health-related decision making. Cooperation between patients, their families and healthcare workers, which is facilitated by family-centered care, empowers

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patients and reduces care pressure in families. The results of present study showed a significant reduction in parental care pressure after the implementation of family-centered care training. In general, one of the limitations of this study was it small sample size and use of non-random sampling method. We suggest similar studies to be conducted on a larger statistical population, using random sampling method.

Conclusion

Illness and hospitalization of children is a stressful event for their parents and increases their care pressure. In addition to the child, it also affects all family members, and changes the responsibilities of parents from providing to meeting the health needs of children. These factors have physical, mental-psychological, economic and behavioral effects on patients and their families, and reduce their quality of life. Therefore, it is important to pay attention to patients and families in order to understand their needs and plan an appropriate care and treatment that met their needs and empower them in self-care. The results of present study showed that family-centered care training empowers the parents of hospitalized children and reduces their burden of care. However, due to the importance of patient-centered and family-centered care, more research is needed to investigate the advantages of this type of care and training on the parents of hospitalized children, especially fathers of these children, who have a smaller role in the care-treatment process due to their numerous responsivities. More studies are needed on the barriers to implementation of patient-centered and family-centered care.

Acknowledgement

At the end, the researcher would like to thank all the participants who helped us in this study.

Conflict of interest

No conflict of interest was observed in this study.

Ethical Consideration

None

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Tables

Table 1: Comparison of the mean scores of family-centered care perception and its dimensions between the intervention and control group before the intervention

Group / Dimension of family-Centered care perception	Control	Intervention	P-value
Respect (6-24)	12.1 ± 1.27	11.97 ± 1.27	P=0.8
Cooperation (10-40)	23.32 ± 4.3	21.1 ± 2.18	P=0.027
Support (4-16)	9.6 ± 1.88	8.6 ± 2.18	P=0.02
Total	45.03 ± 7.29	41.73 ± 3.1	P=0.02

Table 2: Comparison of the mean scores of family-centered care perception and its dimensions between the intervention and control group after the intervention

Group / Dimension of family-centered care perception	Control	Intervention	P-value
Respect (6-24)	12.3 ± 2.08	16.55 ± 1.17	P<0.001
Cooperation (10-40)	23.34 ± 3.12	32.52 ± 1.72	P<0.001
Support (4-16)	9.4 ± 1.42	14.72 ± 1.14	P<0.001
Total	45 ± 6.31	63.84 ± 2.83	P<0.001

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