

Effects of Anxiety and Supporting the Act of a Mother Hospitalized Patients Provided Information about the Treatment during Hospitalization

Mi-Jin Kim¹ and Young-soon Choi²

¹*Department of Nursing, Seoul National University 103, Daehakro, Jongno-gu, Seoul, 03080, Republic of Korea*

²*Department of Nursing, Kangwon National University 346, Hwangjo-gil, Samcheok, 25949, Republic of Korea*

¹*Kimijin29@hanmaul.net, ²ysc615@kangwon.ac.kr*

Abstract

The purpose of this study was to examine the effects of procedure information offering via a video clip on the anxiety and supporting behaviors of mothers with hospitalized children. As for research design, a quasi-experimental research was implemented by adopting a non-equivalent control group pretest-posttest design. The subjects in this study were 64 mothers who were selected from among the mothers whose hospitalized children were at the ages of six and down and underwent invasive procedures in a pediatric ward of a university hospital in an urban community. This study was conducted with the consent of the mothers from June 15 to September 30, 2016. An experimental group and a control group were made up of 30 and 34 mothers respectively. The findings of the study were as follows: The experimental group that was provided with procedure information via video clips felt less anxiety than the control group that wasn't, and the former showed more supporting behaviors than the latter. This study is expected to make a contribution to the development of educational materials geared toward mothers of hospitalized children.

Keywords: *Anxiety, Supporting the act, Information, Hospitalization*

1. Introduction

In our country, mothers who are primarily responsible for child rearing in their families usually feel anxiety, fear, discouraged, lethargic or guilty when their hospitalized children undergo scrutiny or receive treatment. And they are close supporters who can relieve the pains of their children who aren't yet good at verbal expressions.

Children who are admitted to hospital suffer a lot of mental injuries. They have to endure physical pains caused by the disease, and they feel more anxiety, fear and worries than adults and have to adapt themselves to the strange environments. Afterwards, this experience exerts a huge influence on their physical recovery, emotional stability, growth and development. In fact, however, parents are at a loss how to cope with the unfamiliar stressful situation, and they also experience negative emotions such as a feeling of helplessness, fear, a sense of guilt or depression [1].

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Lots of studies established that procedures by an injection needle are most painful for children [3]. Children and parents are keenly aware of pains especially when invasive procedures are provided like injection or blood collecting. Parents want to be with their children, no matter what happens, and they also want to know why the procedure is necessary, how to proceed with it, how long it hurts and how they can help their children so that they could be well ready [4].

When parents cope with their children's pain in an effective way, it often exercises little influence on treatment or rather produces adverse effects, provoking their children into having more pain and impeding treatment [5]. If the nursing needs of mothers who are instrumental in nursing are accurately grasped and satisfied, it can have a positive impact on the fast recovery of child patients.

Nurses should not only provide firsthand nursing interventions to further the physical comfort of hospitalized children but also be responsible for offering education and supportive nursing for them and their mothers to get used to the new surroundings without feeling tension or anxiety as much as possible. A Study found that nursing education programs geared toward parents could increase the knowledge of parents and have a good effect on emotional regulation [6].

The purpose of this study was to examine the effects of procedure information offering via a video clip on the anxiety and supporting behaviors of mothers with hospitalized children in an effort to raise awareness of the utilization of video-clip information offering as one of practical nursing interventions.

2. Method

2.1. Research design

A quasi-experimental research was implemented by adopting a non- equivalent control group pretest-posttest design to determine the effects of procedure information offering via a video clip on the anxiety and supporting behaviors of mothers with hospitalized children.

	Pretest	Treatment	Posttest	Video education	Pretest	Video education	Treatment	Posttest
Control Group	D1	O	D2	X				
Exp. Group					D1	X	O	D2

X: video-clip education on procedures during hospitalization (this was provided for the control group after the group took a posttest).

O: procedures during hospitalization n (invasive procedures)

D1: pretest, D2: posttest

Figure 1. Research design

2.2. Research design

The subjects in this study were 64 mothers who were selected from among the mothers whose children were six years old or younger and were hospitalized in a pediatric ward of a university hospital in a city. The children of the selected mothers

had to go through invasive procedures. This study was implemented with the consent of the mothers from June 15 to September 30, 2016. The mothers whose children were re-hospitalized during the period of the study and whose children were admitted to the hospital through the emergency room were excluded.

2.3. Instrumentation

2.3.1. Program

The program used in this study was a video-clip maternal education program titled "Are you bewildered at the hospitalization of your child?" After a group of experts who were two nursing professors, four nurses of the pediatric ward and the nurse manager were asked to give advice on what's educated in the hospital, a pilot survey was conducted on three selected people to modify the program. The video-clip program runs approximately five minutes. In the program, the importance of maternal support for hospitalized children was stressed, and there were explanations on the necessity and methods of intravenous injection and blood collecting, the types of blood tests, after-skin test, treatment for fever and the use of Nebulizer. Narration was added to improve the understanding of mothers, and additional educational materials were offered to increase their understanding of their children's diseases.

The Anxiety Inventory: Kim Jung-taek, et. al.'s Korean version [9] of Spilberger's anxiety inventory [7] was used to measure anxiety. This inventory consisted of 20 items, which were 10 positive ones and 10 negative ones. A four-point Likert scale was utilized, and one point was given to the answer "absolutely not"; two to "a little"; three to "average"; and four to "absolutely." The range of scores was from a low of 20 to a high of 80. A higher score indicated a stronger anxiety. As to the reliability of the inventory, the Cronbach alpha coefficient of it was 0.9183.

The Maternal Supporting Behavior Inventory during Invasive Procedures : Won Dae-young's inventory [4] was used, which translated Melnyk's Index of Parent during Instructive Procedure that is to observe and measure parental behaviors using two answers: yes or no. This is a modified version to suit Korean parents. Maternal supporting behavior index was utilized, which is to observe and measure the degree of maternal support for hospitalized children during procedures with 16 items on a five-point scale. As for reliability, the Cronbach alpha coefficient of the inventory was .854.

2.4. Data collection

2.4.1. The subjects

Data were gathered from 64 mothers with their consent from June 15 to September 30, 2016. Their children were at the ages of six and down. The children were hospitalized in a pediatric ward of a university hospital in an urban community and underwent invasive procedures. Out of the mothers, 34 mothers were selected as the control group, and 30 mothers were grouped into the experimental group.

2.4.2. The method of data collection

The purpose of the study was explained when the children of the mothers were admitted to the hospital, and the mothers who agreed to participate in the study in writing were selected.

The control group was first investigated to prevent the two groups from being polluted. Usual oral explanations were given to the control group before the children underwent any procedures, and the supporting behaviors of the mothers were observed after written materials were offered. For ethical considerations, the prepared video clip was offered after the procedures were all finished. The experimental group was provided with the video clip before their children went through any procedures, and then their supporting behaviors were observed.

2.5. Data analysis

The collected data were analyzed by a statistical package SPSS. Statistical data on real number and percentage were obtained as to general characteristics, and χ^2 -test was carried out to test the equivalence of the characteristics of the subjects. In addition, t-test was conducted to determine the impact of the video clip on the anxiety and supporting behaviors of the mothers.

3. Results and discussion

3.1. The state anxiety of the mothers

In the state anxiety pretest, the mothers of the experimental group got 2.37 ± 0.55 , and the control group got 2.49 ± 0.55 . After the experimental group took the pretest, the group received education on what procedures would be provided during hospitalization, and then their children underwent the invasive procedures. The experimental group showed a statistically significant decrease of scores from 2.37 ± 0.55 to 1.87 ± 0.46 ($t = -4/224$, $p = 0.000$), but there were no significant differences between the pretest scores of 2.49 ± 0.65 and the posttest scores of 2.47 ± 0.66 in the control group ($t = 0.466$, $p = 0.644$) [Table 1].

Table 1. Comparison of state anxiety before and after experiment between experimental group and control group

Division	Pre test	Post test	Average difference	t	p
experimental group	2.37 ± 0.55	1.87 ± 0.46	-0.49 ± 0.50	-4.224	0.0000
control group	2.49 ± 0.65	2.46 ± 0.66	-0.03 ± 0.65	0.466	0.644

3.2. The Supporting behaviors of the mothers

The experimental group received the video-clip education on procedures during hospitalization, and then their supporting behaviors were observed. The control group was observed during the procedures after just routine oral explanations were given to them. As a result, the experimental group got a mean of 3.50 ± 0.43 in maternal supporting behavior index, and the control group got a mean of 2.58 ± 0.71 . The difference between the two was statistically significant. In other words, the experimental group that was provided with the video-clip education program on procedures during hospitalization was ahead of the control group that wasn't in terms of maternal supporting behaviors ($t = -6.175$, $p = 0.000$) [Table 2].

Table 2. Comparison of supportive behavior index between experimental group and control group

Division	Mean	Average Difference	t	p
experimental group	3.50±0.43	0.921±0.57	-6.175	.000
control group	2.58±0.71			

The video-clip procedure education program was found to be effective at reducing the state anxiety of the mothers and improving their supporting behaviors.

The experimental group that was provided with the program showed a significant decrease in state anxiety, and the finding of the study corresponded to the finding of a study that the experimental group which was provided with an educational program about invasive procedures showed more decrease in anxiety and showed more supporting behaviors than the control group which wasn't. Another study that investigated the effects of a nursing education program geared toward mothers of hospitalized children on their state anxiety and parental role conviction found that it made significant differences to state anxiety and parental role conviction.

There was a significant increase in the supporting behaviors of the experimental group that participated in the video-clip procedure education program. This finding coincided with the finding of a study that found the supporting behavior index of the experimental group of 34 mothers whose children were aged between 24 months and 60 months in western age and were hospitalized for 72 hours or more at least became higher after information was offered using booklets and cassette tapes [10]. Another study, which investigated how information offering about how to bolster coping skills affected 56 parents of hospitalized children who were going to undergo invasive procedures, found that the experimental group provided with the parental role conviction reinforcement program made a statistically significant progress in supporting behaviors and showed an increase in parental role conviction as well [4]. Furthermore, one more study that examined the influence of a nursing education program geared toward parents of hospitalized children also established that the experimental group which was provided with the program had a significantly better parental role conviction than the control group which wasn't. In the future, nursing education programs should be provided for mothers of hospitalized children in clinical situations, and how the programs affect the offering of nursing intervention should discreetly be considered.

4. Conclusions

Author So far, what effects video-clip procedure information offering had on the anxiety and supporting behaviors of the mothers whose children were hospitalized in a pediatric ward was analyzed. A quasi- experimental research was implemented by adopting a nonequivalent control group pretest-posttest design.

64 mothers participated in this study from June 15 to September 30, 2016. They were selected from among the mothers of children who were hospitalized in a pediatric ward of a university hospital located in an urban community, who were aged between 0 and six and who underwent invasive procedures. This study was implemented with the consent of the mothers after they were divided into an experimental group of 30 members and a 34-member control group.

The findings of the study were as follows: The experimental group that was provided with the video-clip information on procedures during hospitalization felt less anxiety than the control group that wasn't and the experimental group showed more supporting behaviors.

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