



A STUDY TO EVALUATE THE EFFECTIVENESS OF EDUCATIONAL INTERVENTION ON KNOWLEDGE REGARDING PREPARATION OF HOSPITALIZATION FOR SICK CHILDREN AMONG BASIC BSc NURSING STUDENTS AT BANGI INSTITUTE OF NURSING SCIENCES, VIJAYAPUR

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Abstract:

Background of the study: A study, titled “A study to evaluate the effectiveness of educational intervention on knowledge regarding preparation of hospitalization for sick children among Basic BSc nursing students at Bangi Institute Nursing Sciences Vijayapur”. Sick children are different from sick adult. Many illnesses are common in children and adult, but there consequences are different. Children are prone to acquire disease conditions, which are not seen in adult. Some childhood illnesses are peculiar to children, e.g. congenital anomalies, neonatal problems, etc. Sick children can be managed at home. But seriously ill child needs management at hospital or other health care facilities. Hospitalization and prolonged illness have adverse reactions to the children and to their families. Nursing personnel plays supportive role in helping the sick children and their family members for coping with stress of illness and hospitalization. Planned strategies should be adapted during nursing interventions to reduce the stress during history collection, physical examination and various treatment procedures for the sick children. Special approaches and safety precautions should be followed during administration of medications, oxygen therapy, different feeding techniques, parenteral nutrition, ostomy care, pre-operative care, post-operative care, use of restraints, collection of specimens, diagnostic procedures, infection control measures, etc. Anatomical, Physiological, psychological difference of immature children from mature adult should be considered during management of the illnesses.

Approach:

The research approach adopted for this study is an evaluative approach.

Design:

The research design selected for this present study was pre -experimental

Setting:

The study was conducted at Bangi institute of nursing sciences, Vijayapur Karnataka

Participants:

50 Basic BSc nursing students were selected by simple random sampling technique, as a probability sampling method.

Pre-assessment:

The tool was developed by preparation of knowledge questionnaires and content validity of the tool was established by giving to professional experts. Later Educational intervention was administered on the same day of pre assessment.

Post assessment:

Knowledge questionnaire was administered after 7 days of administration of educational intervention to assess its effectiveness.

Results:

The results of major findings indicated that, In pretest Basic BSc nursing students had inadequate knowledge in various aspects of preparation of hospitalization for sick children. Educational intervention was found to be a very effective. The mean post-test level of knowledge is significantly higher than the mean pre test knowledge scores " t "=P<0.01. There was no significant association between the findings and the selected demographic variables.

In post-test knowledge score ranged from 35–38, where as the pre-test knowledge scores ranged from 06-12. The mean post-test knowledge scores ($\bar{x}_2 = 42.00$) was apparently higher than the mean pre-test knowledge score ($\bar{x}_1 = 14.04$). The median of post-test knowledge score ($M_2 = 42.00$) was higher than the median of pre-test knowledge score ($M_1 = 14.04$). Calculated ' t ' value (' t '= 28.11, p < 0.001) is greater than table value,which represents the significant gain in knowledge, through the educational intervention. Hence the hypothesis H1 was accepted. Thus it suggests that the educational intervention has been effective in increasing the knowledge. There is a no statistical significant relationship between gain in knowledge and personal characteristics like age, gender, type of family,other than nursing educational qualification, clinical posting & previous knowledge, Hence the hypothesis (H2) rejected.

Interpretation & Conclusion:

The study concluded that the educational intervention on preparation of hospitalization for sick children was an effective method for providing moderate to adequate knowledge and help students to enhance their knowledge to provide effective nursing care to children during hospitalization.

Implications for clinical practices:

On the basis of findings, it is recommended that a similar study may be replicated issuing a large number of respondents.

Keywords: Knowledge, evaluate, effectiveness, hospitalization, sick children and educational intervention.

1. INTRODUCTION

Hospitalizing a sick child can be a stressful experience for both the child and the family, causing emotional, social, and developmental distress. To minimize trauma, parents can prepare their child by explaining the need for admission and ensuring consistent support throughout the stay.¹

Disease and hospitalization can be the first crisis that a child encounters. The aim of this study is to reveal a clear picture of the meaning of hospitalization in children, to show the experience and behavior of hospitalized children and to discover the meaning and understanding of hospitalization in them.¹

Children's way of reacting to this crisis depends on the age at which the previous experience of disease and isolation took place, hospitalization, compatibility skills, gravity of the disease, and support systems present.²

Holmes and Rahe have devised a scale that includes 41 stress-causing conditions, in order of importance. It is able to predict the relationship between the changes in life and mental health. Writers have considered a numerical value for each situation and have created a scale that evaluates the changes in life. In this scale, disease or getting injured is in sixth position and it has been given a value of 53.³

Thus, it is very important to make them understand that it is not a punishment; rather it is a boon for them. Reassurance is quite important before and while hospitalizing your child. A little reassurance and support can defiantly change the overall negative experience to a stirring one. There are a number of ways by which you can really ease the stress of your child related to the whole hospitalization process.⁸

An easy way to make your child comfortable in the hospitalization process is to make him or her familiar with the hospital ambiance. If an admission date is finalized in advance, then it is recommended to take your child to hospital prior to that, as this will help him or her understand the working and the procedures of a hospital. Moreover, it will also give your child a chance to be familiar with the staff of pediatric department, so that during the hospitalization, your child does not feel that he is alone in the unfamiliar environment. Some of the hospitals also provide certain activities for children, so that they feel comfortable in this environment.⁴

The child needs elective surgery and a date has been scheduled. Unlike emergency surgery, an elective procedure isn't done as an immediate matter of life and death. Having an elective procedure gives you the time to prepare your child for the hospital and the surgery. Good preparation can help kids feel less anxious about the anesthesia and surgery and get through the recovery period faster. But, like parents everywhere, you're probably uncertain about the best way to prepare your child.⁸

The key is to provide information at your child's level of understanding, correct any misunderstandings, and get rid of fears and feelings of guilt. Help your child understand why the surgery is needed and to become familiar with the hospital and some of the procedures he or she will undergo. Kids of all ages cope much better if they have an idea of what's going to happen and why it's necessary. To do that, prepare yourself first and correct any misconceptions of your own. If a parent is anxious and nervous, a child will often reflect these feelings and behaviors. So educate yourself, feel comfortable with the process, and make sure all your questions are answered.⁵

Explaining What Will Happen to your child's level of understanding, about what to expect at the hospital. Discuss each idea and encourage your child's questions. As you discuss the hospital and surgery, remember that in addition to your words, your nonverbal cues convey assurance: your tone of voice, facial expressions, gestures, and body language send powerful messages. If you appear fearful, your child is likely to feel fearful.⁷

2. Pre-Admission Preparation

- **Honest Communication:** Provide factual explanations about the hospital stay and procedures using simple, non-medical terms that the child can understand. Be truthful and encourage them to ask questions.
- **Timing of Information:** The timing of preparation should align with the child's developmental stage.
 - **Toddlers (1-3 years):** Inform a day or two before admission.
 - **Preschoolers (3-5 years):** Inform a few days in advance.
 - **School-age (6-11 years) and Adolescents (12-18 years):** Inform about one week in advance to allow time for processing and asking questions.
- **Hospital Tours/Resources:** If possible, take a pre-admission hospital tour. Many children's hospitals offer resources, including books and videos, that explain the process.
- **Medical Play:** Use dolls or stuffed animals to "practice" medical procedures (e.g., bandaging, using a stethoscope) to help the child become familiar with equipment and the sequence of events.
- **Pack Familiar Items:** Allow the child to pack a bag with favorite comfort items, such as a special blanket, toy, or a family photo, to provide a sense of security and continuity with home life.
- **Involve Siblings:** Include siblings in the preparation process to address their own anxieties and prevent feelings of jealousy or guilt.
- **During the Hospital Stay**
- **Minimize Separation:** Encourage parents to stay with the child (rooming-in) as much as possible. If parents need to leave, they should inform the child when they will return and leave a transitional object.

- **Maintain Routine:** Adhere to the child's usual schedule for sleeping, eating, and bathing as much as the condition allows to provide a sense of normalcy and control.
- **Promote Control:** Offer the child choices whenever possible (e.g., "Would you like your medicine in applesauce or pudding?" or "Which arm would you like the blood pressure cuff on?") to foster independence.
- **Encourage Play:** Utilize play, both unstructured and therapeutic, as an outlet for expressing feelings and fears. A child life specialist can assist with appropriate activities.
- **Provide Comfort Measures:** Use holding, rocking, and other soothing techniques to reduce distress. Parents or primary caregivers are vital in providing comfort.
- **Be an Advocate:** Parents should communicate with the healthcare team about the child's specific needs, coping skills, and previous hospital experiences.
- **Ensure Privacy:** Provide privacy, especially for school-age children and adolescents who are more conscious of their body image and modesty.
- **Post-Discharge**
- **Monitor Behavior:** Be aware that some regression (e.g., bedwetting, thumb-sucking) is common after hospitalization and usually resolves quickly.
- **Follow Instructions:** Ensure parents understand all discharge instructions regarding medication, follow-up appointments, and home care needs.
- **Emotional Support:** Continue to talk about the experience and encourage the child to express their feelings, offering reassurance and love regardless of the words we use.⁹
- The aim of this study is to reveal a clear picture of the meaning of hospitalization in children, to show the experience and behavior of hospitalized children and to discover the meaning and understanding of hospitalization in them.

OBJECTIVES:

1. To assess the knowledge regarding preparation of hospitalization for sick children among Basic BSc nursing students.
2. To evaluate the effectiveness of Educational intervention regarding preparation of hospitalization for sick children among Basic BSc nursing students.

3. To find the association between the knowledge regarding preparation of hospitalization for sick children among Basic BSc nursing students with selected socio demographic variables.

HYPOTHESIS:

H_1 : There will be significant difference between pretest and post test knowledge scores of subjects exposed to educational intervention on preparation of hospitalization for sick children

H_2 : There will be significant association between post test knowledge scores regarding preparation of hospitalization for sick children and selected demographic variables.

3. METHODOLOGY

Research Approach : Evaluative approach

Research Design : Pre experimental design

Sampling technique : Probability; Simple Random Sampling Technique

Sample size : 50

Setting of study : Bangi Institute Nursing Sciences, Vijayapur Karnataka'

Tool used for data collection: Following tools used for the data collection.' Personal data consisting of 5 items which includes age, gender, other degree, monthly income, attended any in-service education programme, seminars, etc.,

Part-II

It consists of 40 items to assess the knowledge of BSc nursing students regarding preparation of hospitalization for sick children. It has four sections as mentioned below.

Section A: Consist of 6 items on general information regarding hospitalization.

Section B: Consist of 12 items on knowledge of Basic BSc nursing students regarding effects of hospitalization.

Section C: Consist of 10 items on knowledge of Basic BSc nursing students regarding reactions of hospitalization.

Section D: Consist of 12 items on knowledge of Basic BSc nursing students regarding minimize stressors causing fear and anxiety and coping strategy.

PROCEDURE OF DATA COLLECTION:

Data was collected after obtaining administrative permission from Bangi Institute Nursing Sciences, Vijayapur Karnataka.

The investigator personally explained the participants the need and assured them of the confidentiality of their responses. Data was collected through knowledge questionnaires. The test was conducted based on their availability and convenience. Soon after the test, the learning intervention was administered.

4. RESULTS

The findings related to socio-demographic variables of participants

Part- I: Frequency and percentage distribution of socio-demographic variables of participants

N=50

The Percentage wise distribution of sample according their age depicts that, Most of the subjects i.e. 48 (96%) were in the age group of 21-25 years; only one(2%) was above 26 years old.

Percentage wise distribution of sample according to their other educational qualification that, majority subjects (92%) had no other qualification & (8%) having other than BSc Nursing qualification.

The Percentage wise distribution of sample according to their clinical posting reveals that, majority of students (46%) had ortho ward experience, (32%) of them were had surgery ward experience & (22%) had pediatric and other ward experience.

The Percentage wise distribution of sample according to their type of family reveals that, in rural area most of (80%) the subjects were joint family and 20% of them were Nuclear.

The Percentage wise distribution of sample according to their source of information depicts that, in rural area most of (5%) the subjects getting from friends, 43% of them were getting information from mass media, 6% from others and 46% were getting information from medical professionals.

Part-II: Assessment of levels of knowledge regarding preparation of hospitalization for sick children among Basic BSc nursing students.

Table-1 Range, mean, median & standard deviation of pre & post test knowledge scores of Basic BSc nursing students on preparation of hospitalization for sick children.

N = 50

Test	Range	Mean	Median	Standard deviation
Pre-test	06 – 12	08.6	10	2.77
Post-test	35 – 38	36.54	35	1.83

Table-1 reveals that the Data in table – 3 represents that the post-test knowledge score ranged from 35 –38, where as the pre-test knowledge scores ranged from 06-12. The mean post-test knowledge scores ($\bar{x} = 36.54$) was apparently higher than the mean pre-test knowledge score ($\bar{x} = 08.6$).

The median of post-test knowledge score ($M_2 = 35.00$) was higher than the median of pre-test knowledge score ($M_1 = 10$).

Table-2 Mean, difference of mean, Standard Deviation and 't' value of pre and post-test knowledge scores of staff nurses.

N = 50

Group	Mean		difference of mean	Standard deviation		't' value	P value
	Pre-test	Post-test		Pre-test	Post-test		
BSc Nursing Students	08.6	36.54	27.94	2.77	1.83	28.11	P<0.001

Table-2 reveals shows that computed 't' value ('t'= 28.11, p< 0.001) is greater than table value, which represents the significant gain in knowledge, through the Educational intervention. Hence the hypothesis H₁ was accepted. Thus it suggests that the educational intervention has been effective in increasing the knowledge of Basic BSc nursing students about preparation of hospitalization for sick children.

Table-3 Comparison of mean percentage and SD between pre-test and post-test in various aspects of preparation of hospitalization for sick children.

N=50

Pre Test				Post Test			
Sl No.	Area	Mean	SD	Mean	SD	"t" value	P value
1	Knowledge	9.31	1.05	23.72	0.56	42.61	P<0.001
2	Understanding	4.73	2.04	1.93	0.66	51.63	P<0.001
3	Application	1.91	1.23	4.55	0.47	15.38	P<0.001

Z = 5.81 (Table value = 1.96)

The data presented in the Table 3 depicts the shows that the mean knowledge scores of the pre-test were maximum in the area of knowledge (9.31) & minimum in the area of application (1.91). The mean knowledge scores of post-test were maximum in the area of knowledge (23.72) and minimum in the area of application (4.55).

Mean difference between possible gain and actual gain is calculated and found to be least in the area of understanding. Knowledge (23.72) indicates that the gain in knowledge in this area was maximum comparing to other areas.

Table-4 Relationship between post-test knowledge level and demographic variable on preparation of hospitalization for sick children.

Sl.No	Personal characteristics	Below median score	Above median score	Chi Sq Value	Level of Significance
1	Age: 21-25 > 26	22 01	25 02	0.206 d.f. =1 p = 0.64	NS
2	Gender Male Female	13 09	11 17	1.936 d.f. =1 p = 0.16	NS
3	Type of family Joint Nuclear	14 12	11 13	0.321 d.f. =1 p = 0.57	NS
4	Area of clinical posting Medical Ortho Pediatric Surgical	09 11	14 16	0.013 d.f.=1 p=0.907	NS
5	Other education qualification Diploma Other degree	12 13	11 14	0.081 d.f. =1 p = 0.77	NS
6	Previous Information	15 13	12 10	0.005 d.f. =1 p = 0.94	NS

df: Degrees of Freedom

NS: Not Significant

Table-4 reveals that the association of the knowledge scores of Basic BSc nursing students with their selected socio-demographic variables shows that, there is a no statistical significant relationship between gain in knowledge and personal characteristics like age, gender, other education qualification, type of family, area of work.& previous source of information. Hence the hypothesis (H_2) rejected.

5. CONCLUSION

On the basis of the findings of the study, the following conclusions are drawn:

- The findings showed that few of the subjects had inadequate knowledge in the pre-test whereas all the subjects had adequate knowledge in post-test. The mean Post-test percentage scores and the modified gain scores in all areas were found to be high; the maximum gain was in the area of knowledge and minimum in the area of application.
- The 't' test, which was computed between pre-test and post-test knowledge scores, indicated a true gain in the knowledge. Hence it was concluded that educational intervention was effective as a method to improve knowledge among BSc nursing students.
- The association of the knowledge scores of Basic BSc nursing students with their selected socio-demographic variables shows that, there is no statistical significant relationship between gain in knowledge and personal characteristics like age, gender, other education qualification, type of family, area of clinical posting.& previous source of information. Hence the hypothesis (H_2) rejected.

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