

A Descriptive Study to Assess the Knowledge of Staff Nurses Regarding the Use of Origami Work in Reducing Stress and Anxiety Among Hospitalized Children at Selected Original article Hospitals of Kanpur, Uttar Pradesh

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Abstract

Origami work is a simple and creative non-pharmacological intervention used to reduce stress and anxiety among hospitalized children. Hospitalization often causes emotional distress due to unfamiliar environment, separation from parents, and medical procedures. Nurses play a vital role in implementing therapeutic play activities such as origami work to promote relaxation and emotional well-being among children. A descriptive research design was used in this study. A total of 100 staff nurses from selected hospitals in Kanpur, Uttar Pradesh, were selected through a convenient sampling technique. Data were collected using a structured knowledge questionnaire. The findings revealed that 52% of staff nurses had moderately adequate knowledge, 28% had adequate knowledge, and 20% had inadequate knowledge regarding the use of origami work in reducing stress and anxiety among hospitalized children. Significant associations were found between knowledge level and educational qualification ($\chi^2 = 4.62$, $p < 0.05$), years of experience ($\chi^2 = 9.72$, $p < 0.05$), and previous training on origami work ($\chi^2 = 11.56$, $p < 0.05$). No significant association was observed with age ($\chi^2 = 3.21$, $p > 0.05$), gender ($\chi^2 = 0.85$, $p > 0.05$), or area of work ($\chi^2 = 2.18$, $p > 0.05$). The study indicates that most staff nurses possess moderately adequate knowledge regarding the use of origami work in reducing stress and anxiety among hospitalized children; however, structured training programs are needed to improve knowledge and promote the use of origami work in pediatric nursing care.

Keywords: Origami Work, Knowledge, Stress, Anxiety, Hospitalized Children, Staff Nurses

Introduction

A child is a unique individual; he or she is not a miniature adult, not a little man or woman. The childhood process is vital because of socialization process by the transmission of attitude, customs, and behavior through the influence of the family.¹

Hospitalization is distressing for offspring of any age during a genuine sickness. Much more

established kids have an extraordinary requirement for their people and can endure their nonattendance just for brief period. They need to realize that their persons will be there when they need them most and that are missed and cherished. When a child is brought to the hospital, they are taken out of their normal environment and routines, including their regular interactions with

siblings, school, and friends' social and athletic lives²

Hospitalization is distressing experience for children, leading to heightened anxiety due to unfamiliar environments, procedures, and separation from family.³ This anxiety not only impacts children's emotion but also hinders recovery, prolongs hospital stays, and increases the burden on caregivers.⁴

During hospitalization of a child as a health care worker we focus on emotional stability of the child as they expose to the new surroundings of the hospital. To stabilize their mind we can provide intervention to minimize anxiety for that various therapy can provide to a child to divert their mind from the stressful situation. Many therapies like music therapy, play therapy, art therapy can be used to minimize their anxiety.⁵

Non-pharmacological interventions, particularly creative therapies, have gained attention to alleviate anxiety in children.⁶ Among these, origami—the traditional Japanese art of paper folding—has emerged as a promising therapeutic tool.⁷ Origami is simple, cost-effective, and engaging, fostering relaxation, concentration, and a sense of accomplishment.⁸

Staff nurses play a vital role in providing holistic care to hospitalized children. Their knowledge and practice regarding therapeutic play activities such as origami work are essential for effective implementation. Assessing the knowledge and practice of staff nurses can help identify gaps and improve pediatric nursing care. Hence, the present study was undertaken to assess the knowledge and practice of staff nurses regarding the use of origami work in reducing stress and anxiety among hospitalized children.

A child's overall health is more than physical, mental and emotional health. Children's health focuses on well-being of children from conception through adolescence. It is concerned with all aspects of children's growth and development and with the unique opportunity that each child has to achieve their full potential as a healthy adult.⁹

For infants and young children, hospitalization is an

entirely new experience. They formed friends with physicians or nurses when they were taken to a private physician's office or a clinic, but they are too young to grasp that hospital workers are also friends. Because parents are prone to anxiety, their fears are passed down to their

children.¹⁰ A child's manner of life, or everyday "job," is play. It's also one of the most effective stress-reduction techniques from childhood. The sick child requires play to fill lonely hours and to lessen the damage produced by hospitalization by expressing thoughts and emotions through it.¹⁰ Illness and hospitalization put the child and his or her family under a lot of stress and make it difficult to adjust. Nurses provide comfort, strength, and information to parents and their children.¹¹

A quasi-experimental pre-test and post-test control group design was adopted for the study. The sample consisted of 60 hospitalized children aged 6–10 years selected using convenient sampling technique. The participants were divided into experimental group (n=30) and control group (n=30). The experimental group received 30-minute origami therapy sessions for seven consecutive days along with routine hospital care, whereas the control group received standard hospital care only. Anxiety levels were assessed before and after the intervention using a validated behavioural observation checklist. The findings revealed that the experimental group showed a significant reduction in anxiety levels following origami therapy ($p < 0.001$). The post-test comparison between experimental and control groups indicated that children who received origami therapy had lower anxiety levels than those who received routine care. The study concluded that origami therapy is an effective, simple, and engaging non-pharmacological intervention for reducing anxiety among hospitalized children. Incorporating origami therapy into pediatric care may improve emotional well-being and enhance the overall hospital experience of children.¹²

However, origami work is a simple, safe, and cost-effective therapeutic activity that can be used by nurses to reduce stress and anxiety among hospitalized children. Staff nurses play an important

role in providing holistic care and promoting emotional well-being of children during hospitalization. Adequate knowledge regarding origami work is essential for nurses to implement this activity effectively in pediatric settings. Limited knowledge and lack of training may prevent nurses from using origami work in routine care. Therefore, the present study was undertaken to assess the knowledge of staff nurses regarding the use of origami work in reducing stress and anxiety among hospitalized children at selected hospitals of Kanpur, Uttar Pradesh.

Objectives of The Study

1. To assess the knowledge of staff nurses regarding the use of origami work in reducing stress and anxiety among hospitalized children.
2. To find the association between knowledge of staff nurses and selected demographic variables.

Hypothesis

Research Hypothesis

H₁: There is a significant association between knowledge of staff nurses and selected demographic variables.

Null Hypothesis

H₀₁: There is no significant association between knowledge of staff nurses and selected demographic variables.

Methods and Materials

Research Approach

The present study used a descriptive research approach.

Research Design

The research design used in the present study was Descriptive research design.

Variables

Research Variable

Knowledge of staff nurses regarding the use of origami work in reducing stress and anxiety among hospitalized children was the research variable.

Demographic Variables

Selected demographic variables such as age, gender, educational qualification, years of

experience, area of work, and previous training on origami work.

Population

The population of the present study consisted of staff nurses working in selected hospitals of Kanpur, Uttar Pradesh.

Target Population

The target population of the present study included staff nurses working in pediatric wards of selected hospitals of Kanpur, Uttar Pradesh.

Accessible Population

The accessible population of the present study comprised staff nurses working in pediatric wards in U.H.M. Ursula Horsman Memorial hospital, Kanpur and Shyam Children and Maternity Centre, Kalyanpur, Kanpur, Uttar Pradesh. who were available during the period of data collection and met the inclusion criteria.

Sample

The sample for the present study comprised staff nurses who fulfilled the inclusion and exclusion criteria.

Sample Size

The sample size for the present study consisted of 100 staff nurses working in selected hospitals of Kanpur, Uttar Pradesh.

Sampling Technique

Convenient sampling technique was used to select the samples for the present study.

Sampling Criteria

Inclusion Criteria

Staff nurses working in pediatric wards
Staff nurses willing to participate in the study
Staff nurses available during data collection

Exclusion Criteria

Staff nurses who were on leave during data collection

Staff nurses not willing to participate in the study

Methods of Data Collection

Data collection was done using:

A structured questionnaire assessing knowledge of staff nurses regarding the use of origami work in

reducing stress and anxiety among hospitalized children.

Development of Research Tool

The structured research tool was developed based on review of literature, expert opinion, and evidence-based nursing practices related to origami work for reducing stress and anxiety among hospitalized children.

Description of The Tool

Results and Findings

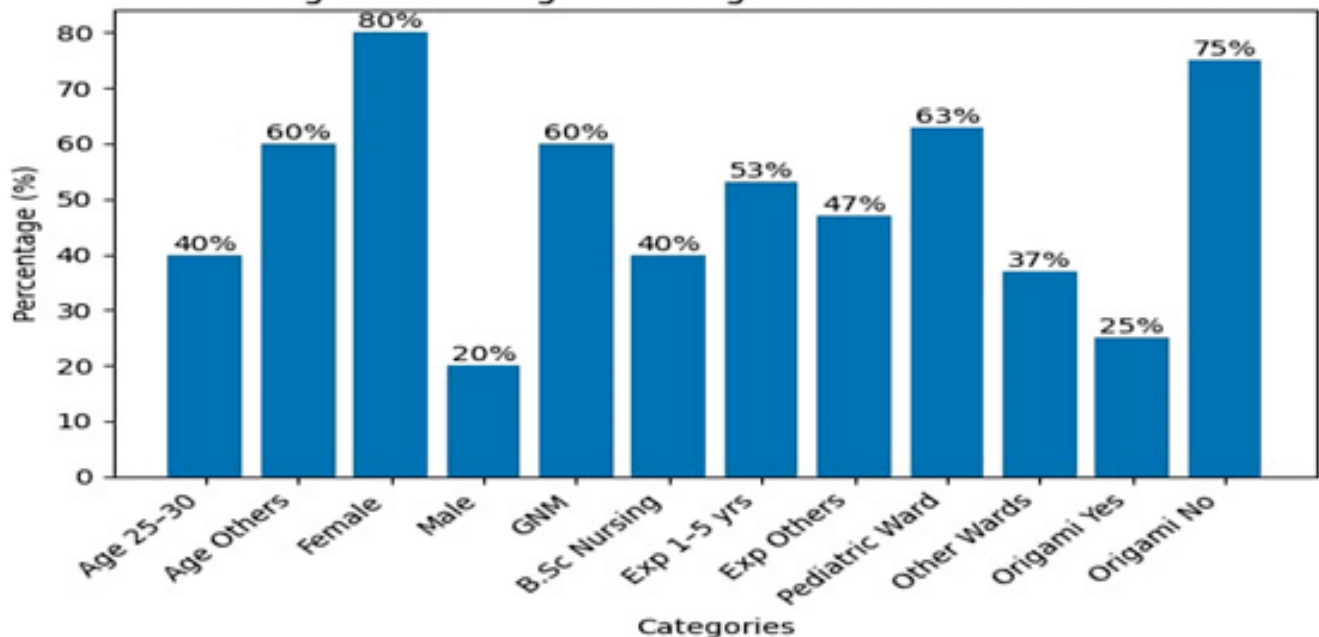
Section A: Distribution of Staff Nurses According to Socio-Demographic Variables

S. No	Demographic Variables	Category	Frequency (n)	Percentage (%)
1	Age	25–30 years	40	40%
		Others	60	60%
2	Gender	Female	80	80%
		Male	20	20%
3	Educational Qualification	GNM	60	60%
		B.Sc Nursing	40	40%
4	Years of Experience	1–5 years	53	53%
		Others	47	47%
5	Area of Work	Pediatric Ward	63	63%
		Other Wards	37	37%
6	Previous Knowledge on Origami	Yes	25	25%
		No	75	75%

Structured Knowledge Questionnaire:

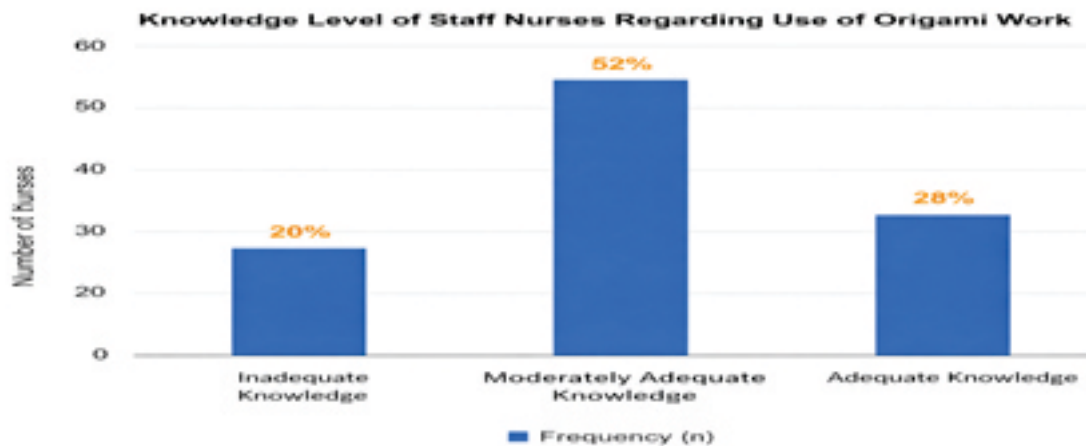
The structured knowledge questionnaire consisted of 20 multiple-choice questions assessing staff nurses' knowledge regarding meaning, benefits, materials, procedure, and effectiveness of origami work in reducing stress and anxiety among hospitalized children.

Bar Diagram Showing Percentage Distribution of Staff Nurses



**Figure 01: Bar Diagram Showing Percentage Distribution of Staff Nurses
Section B: Knowledge Level of Staff Nurses Regarding Use of Origami Work**

Knowledge Level	Frequency (n)	Percentage (%)
Inadequate Knowledge	20	20%
Moderately Adequate Knowledge	52	52%
Adequate Knowledge	28	28%



**Figure 02: Bar Diagram Showing Percentage Distribution of Staff Nurses
Section C: Association Between Knowledge Level**

of Staff Nurses and Selected Demographic Variables Regarding Use of Origami Work in Reducing Stress and Anxiety Among Hospitalized Children

Variable	Chi-Square Value (χ^2)	p-value	Significance
Age	3.21	> 0.05	Not Significant
Gender	0.85	> 0.05	Not Significant
Educational Qualification	4.62	< 0.05	Significant
Years of Experience	9.72	< 0.05	Significant
Area of Work	2.18	> 0.05	Not Significant
Previous Knowledge on Origami Work	11.56	< 0.05	Significant

Nursing Implications

Nursing Practice

Staff nurses can use origami work as a simple, safe, and cost-effective non-pharmacological intervention to reduce stress and anxiety among hospitalized children. It helps in distraction, improves cooperation, and enhances emotional well-being. Nurses can also educate parents and incorporate origami work as part of routine pediatric care.

Nursing Education

Origami work should be included in pediatric

nursing education. Workshops, demonstrations, and in-service education programs should be conducted to improve nurses' knowledge and skills in using origami work for stress and anxiety reduction among hospitalized children.

Nursing Administration

Nursing administrators should organize training programs and develop guidelines for using origami work in pediatric wards. Adequate materials should be provided, and staff nurses should be encouraged to implement origami work as part of therapeutic play.

Nursing Research

Further research can be conducted to assess the effectiveness of origami work in reducing stress and anxiety among hospitalized children. Comparative and experimental studies with larger sample sizes are recommended.

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Conflicts of interests: There is no conflict of interest

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