

EFFECT OF HOSPITAL CLOWN ON POSTOPERATIVE DISTRESS IN CHILDREN

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Abstract- Humor is always being a best form of therapy. Hospital clowns were shown to be beneficial in many medical contexts including reduction of stress, anxiety and pain by humour. The title of the study was effect of hospital clown on postoperative distress among children. The primary objective is to evaluate the effect of hospital clown on postoperative distress among children undergoing surgery. The research approach was quantitative and the design was quasi experimental post-test only control group design. According to the inclusion criteria 40 children in the age group of 3 to 8 years undergoing surgery were selected. The investigator selected the control group first on the day of admission after getting consent from parents. The children were received the routine preoperative care in hospital and the effect of postoperative distress was assessed on the first postoperative day. After completing the data collection from the control group, children for the experimental group were selected, they had interaction with hospital clown preoperatively, on the day of surgery and postoperatively. The effect of clown on postoperative distress was assessed by using Wong Baker Faces Pain rating scale and CHEOPS Behavior assessment scale on the second day of surgery. The collected data were analyzed and results were expressed in descriptive and inferential statistics. It was found that the mean pain score among control group was 7 ± 1.2 and that of experimental group was 3.6 ± 1.2 , and the mean CHEOPS score of control group was 11.8 ± 0.9 and that of experimental was 7.1 ± 2 . The observed difference in pain and CHEOPS score due to the intervention was statistically significant ($P < 0.01$). So it was concluded that hospital clown was effective in reducing postoperative distress among children.

Key words: Hospital clown, Postoperative distress.

INTRODUCTION

Children are not just little adults. When dealing with children medically, it is important to keep in mind the stage of their physical growth and development; their emotional development; and their maturity level. Fear of the unknown complicates life in many ways for children. Thus, it is helpful to give them information prior to situations for which they may have little or no understanding. A child's hospitalization is usually an unpleasant and difficult experience, both for the children and the parents. Children need to be informed to help them cope with their imagination and to help distinguish reality from fantasy.

Hospitalization is considered an adverse event in life, usually causing distress that may become traumatic, especially for children¹. Even a minor pediatric hospitalization can have negative consequences on the emotional, behavioral, cognitive, and educational development of a child². Feelings of tension, uneasiness, and anxiety are some of the many symptoms that children may experience during the hospitalization period.³

In recent decades, humor has become an important component of mental and physical health other than a mere socially desirable individual's trait. Clown therapy represents a peculiar way of using humor in order to promote people's well-being. Clown therapy officially started in 1986. Clown therapy is defined as the implementation of clown techniques derived from the circus world to contexts of illness, so as to improve people's mood and state of mind.

Clowns have probably worked in hospitals since the time of Hippocrates, as doctors of that era thought that a good mood positively influenced the healing process. One of the most salient aspects related to clowning is humor. The purpose of clowning is to bring smiles and laughter to an audience of all ages. Contrary to popular opinion, clowns are not strictly children's entertainers, as adults may enjoy clowns too. An effective clown makes people laugh so humor is his main instrument. He should be able to accept humor as an integral part of life, improve his personal sense of humor, listen and learn how other people recognize and use humor, and be prepared to respond to other people's humor.⁴

During the last half of the 20th century, a tremendous change happened in health research; clinicians, medical doctors, and psychologists began to study the effects of laughter both on the body and mind, from a scientific perspective. It was in this scenario that clowning had the possibility of being introduced into the hospital and became the currently well-known practice.¹

Thus the clown as the ultimate comic figure creates interactions with child based on humor, which empowers, calms, and strengthens the child. Medical clowning is an interdisciplinary therapeutic art, and the medical clown can use multiple skills including humor, drama, music and dance, all of which have beneficial therapeutic impact on pediatric population.

Statement of the problem

Effect of hospital clown on postoperative distress among children in a tertiary care centre, Thiruvananthapuram

OBJECTIVES

- To assess the effect of hospital clown on postoperative distress among children.

MATERIALS AND METHODS

Quasi experimental Post-test only control group design was used for the study.

Through this design the investigator is able to appraise the effect of hospital clown on the experimental group and compare the variable with the control group.

The tool for data collection were socio demographic and clinical data of the children, Wong Baker faces pain rating scale to assess pain and CHEOPS behavioral assessment scale to assess behavior response.

The period of data collection was from 06/01/2020 to 15/02/2020. The investigator establishes rapport with the client and the purpose of the study was explained.

The investigator selected the control group first, on the day of admission getting consent from the parents. The investigator collected the socio demographic and clinical data of children and they were received only the routine preoperative care.

The investigator met the control group again on the day of surgery before they entering into operation theatre, and then the assessment of pain and behaviour response is carried out in the first postoperative day. The children for the experimental group were selected after getting consent from parents. After the admission procedure, the clown interacted with the child and maintained a close contact with the child for about 10 minutes. After 10 minutes the clown again met the child, through play way method the clown communicated with the child and mother and demonstrated the placement of, oxygen mask, IV cannula, infusions, surgical dressing etc., with the help of a doll, through this the child could have a realistic image about his appearance in the postoperative period. This session took about 15 – 20 minutes.

On the day of surgery, at the morning the clown met the child again and allowed to play with blowing bubbles, and accompany them into the preoperative room. This session given for 10 minutes.

After the surgery when the immediate effect of anesthesia is over the clown met the child at the evening and communicate with the child. On the second day of surgery, at the morning the clown again came near to the child and after that the assessment of pain was carried out by using Wong Baker Faces Pain Rating Scale and behaviour response was assessed by CHEOPS Behavioural Observational Scale.

RESULTS

Effect of hospital clown on postoperative distress

Table 1. Mean, standard deviation and U value showing the effect of hospital clown on postoperative pain (n=40)

Pain	Mean	SD	n	U	P
Experimental	3.6	1.2	20		
Control	7	1.2	20	5.31	p<0.01

Table 1 shows that the mean pain score of control group was 7 ± 1.2 and that of experimental group was 3.6 ± 1.2 . After the intervention the observed difference in pain score is statistically significant ($P < 0.01$).

Table 2. Mean, standard deviation and t value of CHEOPS score (n=40)

Behaviour responses	Mean	SD	n	t	P
Experimental	7.1	2.0	20	9.73	p<0.01
Control	11.8	0.9	20		

Table 2 shows that the mean CHEOPS score among control group was 11.8 ± 0.9 and that of experimental was 7.1 ± 2 . After the intervention the observed difference was statistically significant (p value <0.01).

DISCUSSION

There are many studies related to application of hospital clown in children hospitalized for various reasons. The present study is emphasized to assess the effectiveness of hospital clown on postoperative distress. The findings of the study were discussed below in relation to the findings of other studies which the investigator has reviewed.

The present study revealed that total pain scale score among the control group was $7 \pm$ and that of experimental group was 3.6 ± 1.2 , after intervention the observed difference was statistically significant ($p < 0.01$) and concluded that hospital clown is effective in reducing postoperative pain among children undergoing surgery. Similar to this study a randomized controlled trial was conducted to assess the effect of medical clowns reduces pre-operative anxiety, post-operative pain and medical costs in children undergoing outpatient penile surgery. The children from the experimental group demonstrated a lower pre-operative anxiety index upon ($P = 0.0319$) and after surgery ($P = 0.0042$), required less induction time for anesthesia ($P < 0.001$), spent overall less time in the operating room ($P < 0.0001$) and required less time to recover from the surgery and to be discharged ($P = 0.0172$).⁵

The current study revealed that total CHEOPS score among control group 11.8 ± 0.9 was and that of experimental group was 7.1 ± 2 , after the intervention the observed difference was statistically significant ($p < 0.01$) and concluded that hospital clown is effective in reducing negative behaviour responses due to pain among children undergoing surgery. This is supported by an experimental study, conducted to determine the effect of the presence of clowns on children's distress and maladaptive behaviours while in hospital for minor surgery. The results suggest that clowns are not able to reduce postoperative maladaptive behaviours in the experimental group.⁶

CONCLUSION

The study concluded that the hospital clown was effective in reducing postoperative distress among children.

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