

Children are precious
and special in the
lives of the parents



**ASSIGN
BUSTER**

Children are the asset of nation. They are precious and special in the lives of the parents. The children are frightened to come to the hospital and start crying on seeing health personnel as they associate hospital and health personnel with pain. Hospitalisation constitutes a crisis in infants life as the child has to undergo major stress like pain.

A population based data on hospital admission for children was done. Of all 79, 272 children , children aged 0-4years and boys were admitted more frequently. During the one year registration period of 79, 272 children age between 0-17 years were admitted. Among this 63. 5% was aged 0-4years, 24. 8%aged 5-9years and 11. 7% aged 10-17 years. So the hospitalization rate is high among preschoolers. In India of about 1889 cases of children mostly less than 5 years of age group children are getting hospitalised with various disease conditions. In all age groups, admission rate were significantly higher among children aged 0-6years than in older age group children(6-9 years-16/1000)and 10-17years(4. 8/1000). (Johans. C. Vander, Journal list > BMC Fam Pract> vii 2010).

Venipuncture and Intravenous cannulation are the routine procedures done in the ward which causes pain and discomfort. Most of the children who undergoing intravenous cannulation may experience moderate or severe pain and elevated level of pre-procedural and procedural distress.

From the Nursing Interventions Classification defined Therapeutic Play is a most purposive and also includes a direct use of toys or some other material like stuffed doll inorder to help the children in proper communication through an effective perception and also improving the knowledge of the children by

helping them in gaining the mastery of their environment.(www. kido enterprises. com)

Play is an excellent activity for all children. . One of the most effective intervention is therapeutic play which includes activities such as permitting the child to give an injection to a doll or stuffed toy to reduce the stress of injection.

Therapeutic play has its main objective the emotional well-being of the child. It accomplishes this through the use of play and or creative arts ' the play therapy tool kit'. It may be used to treat or assist in alleviating a mild one off emotional as well as the psychological problems which is helpful in restricting the child to function in a normal manner.(www. play therapy. org. uk)

NEED FOR THE STUDY

Almost all the children has fear while entering the hospital and also while seeing the personnel working in the hospital especially the staff nurses in giving injection. Thus it is very essential to reduce the fear and the stress of pain of the child by distracting the mind through therapeutic play.

Desiree Lie., (2002) conducted a study on minimizing needle pain in children. Survey suggested that venipuncture is associated with considerable distress among children. Between 34% and 64% of children experience stress of pain from the procedure. The study suggested that 50% of children report needle stick experiences as unpleasant and painful, which causes subsequent high levels of anticipatory fear and distress. The fear of pain and needle phobia in

<https://assignbuster.com/children-are-precious-and-special-in-the-lives-of-the-parents/>

children can lead to poor health consequences, including medical treatment. Different strategies have been reported to reduce the distress associated with venipuncture among children. Distraction techniques such as play therapy can lessen pain in children.

William, Lopez. et. al., (April-2008) examined that therapeutic play is very much useful and effective in making children to get ready for painful procedures. The findings of the study helped in improving the level of awareness of the nurses as well as the parent regarding the need of play, especially highlighting the effectiveness of therapeutic play as an important component in making the children to get ready for painful procedures.

Pain is often associated with fear, anxiety, and stress. A number of non-pharmacologic techniques, such as distraction, relaxation, guided imagery and cutaneous stimulations, provide coping strategies that may help reduce pain perception make pain more tolerable, decrease anxiety and enhance the effectiveness of analgesics. (Kachoyeanos and Friedhoff, 1993)

Behavioural changes are common indicators of pain and are especially valuable in assessing pain in nonverbal children. Children's behavioural responses to pain change with age of follow a developmental trend. Children with more positive moods may appear to be in less pain than they actually are. Children who use passive coping behaviour may rate pain as more intense than children who use active coping behaviour.

Preschoolers respond more favourably to pain than younger children to preparatory interventions such as explanation and distraction. Preschoolers

can locate their pain and can use appropriate pain scales. (Marilyn. J. Hockenberry, Wong's Essentials of Pediatric Nursing)

The past one year of experience in the paediatric ward during the clinical posting many children were admitted. All the admitted babies were started with IV line. It is challenging job for nurses to start IV line for the children. Because of the injection the children will become more aggressive and they cry more. So the nurses were finding difficulty to start IV line. Because of the cry and uncooperativeness with the nurses, sometimes they may get more prick. It leads to worsen the situation. Also the children will be disturbed physically and psychologically. It will also affect the further treatment of the child.

In order to get a good cooperation with the child relaxation of mind of the child is essential. Hence the use of therapeutic play is suitable for relaxation of the child. So the researcher felt the importance of giving therapeutic play before doing painful procedures in preschool children.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of therapeutic play during intravenous cannulation on level of pain among children admitted in a selected hospital at Salem.

OBJECTIVES

1. To prepare and validate the intervention on therapeutic play for management of painful procedures.

2. To assess and compare the post-test level of pain during intravenous cannulation among children between the control group and experimental group.

3. To find out the association between the post test level of pain among the experimental with their selected demographic variables. (age in years, gender, behavioural response to intravenous cannulation).

HYPOTHESES: (Level of significance at $p < 0.05$)

H1: There will be a significant reduction of pain among experimental group after exposed to therapeutic play than control group who have not exposed.

H2: There will be a significant association between the post-test level of pain among children and their selected demographic variables in the experimental group.

H2(a): There will be a significant association between the post-test level of pain among children and their age in the experimental group.

H2(b): There will be a significant association between the post-test level of pain among children and their gender in the experimental group

H2(c): There will be a significant association between the post-test level of pain among children and their behavioural response in the experimental group.

OPERATIONAL DEFINITION

1. Assess the effectiveness:

<https://assignbuster.com/children-are-precious-and-special-in-the-lives-of-the-parents/>

It refers to the changes in the level of pain during intravenous cannulation after therapeutic play among preschool children.

a. Level of pain :

It refers to an unpleasant experience felt by the child during invasive procedure which is assessed by Wong-Baker faces pain rating scale and the score was 0, 2, 4, 6, 8, 10 and it is interpreted as No hurt, hurts a little bit, hurts a little more, hurts even more, hurts a whole lot, hurts worst respectively.

2. Therapeutic play:

It refers to a type of play which is given to the child before intravenous cannulation, this include, permitting the child to give an injection to a stuffed doll by using Venflon without stillet and other needed materials such as plaster, cotton balls and splint.

3. Intravenous Cannulation:

It refers to the insertion of needle into the vein of the child, after getting admitted in the hospital for the purpose of introducing medications.

4. Demographic variables:

(a)Age:

In this study it refers to the age of the child between the age group of 3-6 years who undergone intravenous cannulation.

(b) Gender:

In this study it refers to both boy and girl child.

(c) Behavioural Response to intravenous cannulation:

In this study it refers to the behaviour of the child which involves agitation, fear, relax and cry.

ASSUMPTIONS

1. The child may experience pain during painful procedures.
2. The child may achieve distraction and thereby level of pain is reduced after therapeutic play.

ETHICAL CONSIDERATION

Written permission was obtained from the concerned authority where the study was conducted. Written consent obtained from the mothers after explaining the purpose of the study. All the information was kept confidential and used only for the present study.

DELIMITATION

- Data collection period was delimited to 6 weeks.
- The study was delimited to children undergoing intravenous cannulation only.

- The study was delimited to 20 samples as control group and 20 samples as experimental group..

- The study was delimited to Pranav hospital in Salem.

SUMMARY

This chapter dealt with the introduction, need for the study, statement of the problem, objectives, hypotheses, operational definitions, assumptions, ethical considerations and delimitations.

CHAPTER -II

REVIEW OF LITERATURE

Review of literature is a key step in research process. The literature review is to discover what has previously been done about the problem to be studied, what remains to be done, what methods have been employed in other research and how the result of other research in the area can be combined to develop knowledge.

It is essential step and can be done before and after selecting the problem. It can help to determine what is already known about the topic. (A. P. Jainco. 2005)

The chapter deals with review of literature, the studies reviewed have been arranged under the following sections,

Section-I: Studies related to therapeutic play

Section-II: Studies related to level of pain during painful procedures.

Section-III: Studies related to application of Gate Control Theory

Section-IV: Conceptual Frame Work Based on Gate Control Theory.

SECTION-I: STUDIES RELATED TO THERAPEUTIC PLAY

Zahr., Lina Kurdahi., (2000) an article on therapeutic play for hospitalised preschoolers in Lebanon, it showed that during the period of more than 3 decades that many hospitalised children suffer emotional distress. For the preschool age child, hospitalisation is new and bewildering experience and the hospitalization brought a bad impact on the normal functioning and development of the children who were hospitalized. Various studies had developed in order to reduce the fear and the stress of hospitalization of the children who got admitted in the hospital.. Many of these studies examined the effect of therapeutic play on anxiety level of hospitalised children. The the present study mainly focused on the physiological as well as the behavioural responses to stressful hospital procedures. Since the study was conducted in Leabnon, the results of the study was very much beneficiable for the researchers in making a comparison with the physiological as well as behavioural response of the children. According to the day of admission the research method was adopted.

Schwartz, Albino, and Tedesco., (2002) found that medically related therapeutic play was more effective than medically unrelated therapeutic play. The authors examined the effects of pre operative preparation on pain reduction in 45 children aged 3&4 years. The children were randomly

assigned to one of three groups: a control group, a medically unrelated play therapy group, and a medically related play therapy group. The medically related play included providing information to the child and parent and a role play that resembled actual medical procedures with hospital toys. Results from the study concluded that children in this group were more cooperative and less upset than children in the other two groups, which suggest that medically related play can be more effective in alleviating pain than unrelated play.

Cindy Dell Clark., (2004) a journal issue regarding therapeutic play explain the effectiveness of the play which can be considered as an appropriate therapeutic intervention.. Play is more than matter of cognitive representation. There is no need for a play therapist to practice play. Play is helpful in creating a significant field for transformative meaning construction - there by converting vulnerability in to painful injection in to cause for singing.

Rae, and Colleagues., (2004) compared the effects of play on the psychological adjustment of 46 children, aged 5 to 10 years, who were hospitalised for an acute illness. They randomly assigned the children to one of four groups, therapeutic play, diversional play, verbal support, and no treatment. The therapeutic play consisted of playing with medical and non-medical materials as well as puppets, dolls and toy animals. During this non-directive play, the facilitator encouraged re-enactments of experiences while allowing the child to reflect and interpret feelings. Results showed that children who engaged in therapeutic, non-directive play showed a significant

reduction in self-reported hospital fears in comparison with children from other groups.

Fosson, Martin and Haley., (2006) investigated the effectiveness of guided medical play in reducing anxiety and pain in latency age children. 50 children, aged 5 to 9 years, were randomly assigned to either the control group, where the child watched TV with a recreational therapist for 20 minutes or the experimental group, where a recreational therapist facilitated medically oriented play with the child. This study found that although the mean levels of anxiety and pain of children in the experimental group decreased more than children in the control group, the difference was not sufficient to reach statistical significance. In order to explain these findings, the authors noted that the intervention consisted of only one 30-minute play session and the control group had access to other forms of play during hospitalisation.

SECTION-II: STUDIES RELATED TO LEVEL OF PAIN DURING PAINFUL PROCEDURE

Marion E. Broom., (2000) conducted a study on children's medical fears, coping behaviour pattern and pain perception during a painful procedure. This study explored the relationship among medical fears, coping behaviour patterns and acute pain perceptions in 17 children who were encountering a painful medical procedure. A majority of the children perceived a great deal of pain during the painful procedure. No significant differences were found between the exhibited active or passive coping behaviour and reported

medical fear levels. Implications for practice relate to the need for continual preparation and support of children during a painful procedure.

Vihunen R. Sihvonen., (2005) conducted a study , in this study 3-8 year old children's pain assessment and management after IV cannulation were evaluated on two otological wards. The sample consisted of 80 children. The groups were compared with each other; on one ward nurse used Faces scale in children's self assessment of pain while the other was a comparative ward. The data were analysed by cross -tabulations. 40%of children had severe or intolerable pain after IV cannulation. Children's self assessment of pain and parent's observation correlated. Children had less pain on the ward where the Faces scale was used in pain assessment. However , there were differences in pain management practices between two wards. Nurses need more education to be able to assess and manage children's pain adequately.

Uman, Chambers, Kisely., (2006) conducted a study in determining the interventions that was applicable for the children with needle associated pain and also the stressful responses. . Needle associated treatment are very commonly seen in children with hospitalisation.. The study was done to assess the efficacy of cognitive-behavioural psychological intervention for needle related procedural pain. A variety of evidences are determining the cognitive as well as behavioural responses can be assessed in both children and also the adolescents in determining how to reduce pain and also stress which is associated with painful procedures.

SECTION-III: STUDIES RELATED TO APPLICATION OF GATE CONTROL THEORY

E. Ambika, (2003) to assess the effectiveness of moist heat over dry heat application on episiotomy of primi mothers. In this study, Researcher selected Gate Control Theory of pain for conceptual framework. She concluded that dry heat is more effective than moist heat.

Annonymus., (2003) conducted a study to compare the extent of effectiveness of pain relief between hot and cold application in postnatal women with episiotomy in selected hospitals in Chennai. Modified Gate Control Theory of pain is used for conceptual framework.

Malathi. M., (2006) conducted a study to assess the effectiveness of Simple massage ranch oil massage and normal labour care on labour pain among the primi Para mothers in Government Hospital, Erode. In the study the researcher applied modified Gate control theory for conceptual framework model. She concluded that, less stimulation of free nerve endings due to the effect of massage. So the samples are having less pain perception in the lower abdomen and lumbar region.

SECTION-IV: CONCEPTUAL FRAME WORK BASED ON GATE CONTROL THEORY

Gate Control Theory of Pain:

The Gate control theory of pain was first postulated by Melzack and Wall in 1965. They are the first to suggest that pain has an emotional and also a cognitive components along with physical sensation. The theory suggested that for pain, to pass through the gate there must be unopposed passage for nociceptive information arriving at the synapses in the substantia gelatinosa.

Pain gate is also receiving impulses produced by stimulation of thermo

receptor or mechano receptors transmitted via large diameter myelinated 'A β ' fibres which inhibit and super impose the small diameter impulses. Many non-pharmacological procedures such as massage, distraction technique such as watching TV during venipuncture, effective communication, play, watching cartoons which will stimulate the nerve endings connected with large diameter fibres which can produce a reduction of pain by closing the 'pain gate'.

Based on the principle of gate control theory, the following conceptual framework is developed. Methods used to reduce pain on IV cannulation is by giving therapeutic play among preschool children.

Stimulation of Pain Receptors:

The pain impulses will be carried out by the small diameter, slow conducting 'A, α , C', fibres. Impulses traveled through small diameter fibres will open the 'pain gate' and the person feels pain.

Preschool children having more stimulation of pain reception during intravenous cannulation due to inability to express feelings related to fear and concern, misconceptions, less communication and less cooperation. In the experimental group, a therapeutic play is given as an intervention to reduce the pain during intravenous cannulation. It helps to promote the cognitive and social aspect of development, gives an opportunity for the child to communicate feelings, misunderstandings and concerns in their own language using both verbal and behavioral expression and to express the feelings related to fear and concerns.

The extent to which a child perceives and express pain is a result of his or her emotional state, expectations, personality and cognitive view. Cognitive strategies are part of a wholistic approach to health that the individual and a relationship developed between the body, mind and spirit., cognitive strategies utilize the inner resources of mind to influence the pain experience.

Cognitive strategies work in two ways. First, they activate the descending cortical modulating systems and second, they teach the child to control, rather than be controlled by the pain. These approaches play a significant role in long term pain management.

Gating Mechanism:

The cognitive strategies utilizes the inner resources of mind. this causes activation of descending cortical modulating system. Thus the physical pain can be controlled by relaxation, communication skill, problem solving. This will block the nociceptive circuit synapse and closes the gate of pain, thus the child perceives less pain during intravenous cannulation.