

SUMMARY

Postoperative pain is one of the most common frightening problems for children and one of the most common causes of delayed recovery as well. Improper management of postoperative pain may give rise to dangerous and undesirable outcomes. So, postoperative pain may be feared more than the surgery itself.

Nurses are in a good position to help the children with pain because of the amount of contact they have with those children. In addition, the nurse can establish a relationship with the children and their families to help them learn new ways of pain relieving measures such as the use of simple distraction techniques to reduce the amount of analgesics needed and decrease pain.

Thus the current study aimed to investigate the effect of distraction by playing with toys and listening to short stories on preschool children's postoperative abdominal pain.

The study was conducted at the surgical unit of Benha children hospital. 105 postoperative preschool children of both sexes were included in the study, conscious and able to communicate, free from any other chronic conditions and newly admitted to the surgical unit.

The 105 children were divided into 3 equal groups, the first group played with a mechanical toy and the second group listened to short stories plus receiving the routine hospital care. While the third group served as a control group who received only the routine hospital care.

The Tools Used in The Current Study Were:

Tool I:

A structured interview sheet was specially designed and used to collect general characteristics and biosocial data about the studied children such as name, age, sex, birth order, prescribed analgesics and physiological responses to pain such as body temperature, heart rate, and respiratory rate.

Tool II:

The children's hospital of eastern Ontario pain scale was used to rate the children's intensity of postoperative pain on six verbal and motoric behavioral parameters.

The intensity of pain was determined by measuring vital signs and by using children's hospital of eastern Ontario pain scale before and 20 minutes after practicing each distraction technique twice daily for three successive days. Then a comparison was done to identify the effect of the two distraction methods on minimizing preschool children's postoperative abdominal pain.

For the control group, vital signs and behavioral responses to pain were also measured twice daily for three successive days before and after receiving the routine hospital care.

After data collection, data entry was done using a computer software package. The statistical tests used in the current study were paired t test, ANOVA test, and chi square test.

Findings Obtained From The Current Study Indicated The Following:

The mean values of children ages were 3.95 ± 1.29 , 4.60 ± 1.17 , and 3.97 ± 1.04 for group (I), (II), and (III) respectively. The highest percentage of group (I), (II), and (III) were males representing 85.7%, 60%, and 85.7% respectively. In addition, the first child represented the highest percentage of children's birth order representing 48.6% for group (I), 51.4% for group (II), and 62.9% for group (III).

None of the whole studied sample (100%) had received any form of distraction prior conducting the study. On the other hand, all the studied sample received prescribed analgesics before practicing distraction techniques and they also had their mothers admitted with them.

Regarding the effect of distraction techniques on vital signs, it was found that body temperature was significantly reduced after playing with mechanical toy all over the three successive days. While after listening to short stories body temperature was significantly reduced only at the second day morning and evening shifts and the third day evening shift. Furthermore, after receiving routine nursing care, body temperature was positively reduced only at the second day morning shift. By excluding the first and second day's morning shifts, a positive statistically significant difference was found between the mean values of body temperature after applying the two distraction techniques when compared with the control group.

Moreover, by excluding the first and second day's morning shifts, heart rate was positively reduced after playing with a mechanical toy all over the three days. While, after listening to short stories heart rate was

significantly reduced allover the three successive days by excluding the first day morning shift only. No significant difference in heart rate was found at the three successive days after receiving the routine nursing care. A positive statistically significant difference was found between the mean values of heart rates after applying the two distraction techniques when compared with the control group allover the three successive days.

Respiratory rate was significantly reduced after playing with a mechanical toy allover the three successive days. While, after listening to short stories, respiratory rate was significantly reduced only at the second day evening shift and the third day morning and evening shifts. Moreover, respiratory rate was significantly reduced after receiving routine nursing care only at the second day morning shift. A positive statistically significant difference was found between the mean values of respiratory rates after applying the two distraction techniques when compared with the control group allover the three successive days by excluding only the second day morning shift.

Regarding the children's behavioral response to pain, the score of pain was significantly reduced allover the three successive days after playing with a mechanical toy and listening to short stories as well. While, after receiving the routine nursing care, no significant reduction in pain scoring was found allover the three successive days.

A positive statistically significant difference was found between the mean values of pain scoring after applying the two distraction techniques when compared with the control group allover the three successive days.

A statistically significant reduction in males' and females' physiological parameters and pain scoring was found after playing with a

mechanical toy allover the three successive days. Furthermore, after listening to short stories, there was a statistically significant reduction in males' and females' physiologic parameters and pain scoring except for females' body temperature which was of no statistically significant difference. Moreover there was no statistically significant difference found between males' and females' physiologic parameters and pain scoring after receiving routine hospital care allover the three successive days.

There was an inverse statistically significant correlation only between heart and respiratory rates and the age of the children after playing with a mechanical toy allover the three successive days. Also, there was an inverse statistically significant correlation between body temperature, heart rate, and pain scoring in relation to the age of the children after receiving the routine nursing care allover the three successive days. On the other hand, no statistically significant correlation was found between physiologic parameters and pain scoring of the children and between the children's age after listening to short stories allover the three days.

Also, a positive statistically significant correlation was found only between body temperature and children's birth order after playing with a mechanical toy allover the three successive days. On the other hand, no statistically significant correlation was found between physiologic parameters and pain scoring from one side and between the birth orders of the children from the other side allover the three successive days after listening to short stories as well as after receiving routine nursing care.

Finally, from all the previous, it is concluded that distraction is an effective method in reducing physiological and behavioral pain responses

among children. Thus, it is recommended that distraction techniques should supplement pharmacological interventions in order to achieve the best results in pain management.