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## كتيبات ملخصات البحوث التطبيقية بالكلية للعام الجامعي

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ملخصات الأبحاث التطبيقية بقسم تمريض صحة المجتمع  
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عميد الكلية  
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٥٧٢٥٩



## **Effect of Electronic Learning Package Application on Nurses' Knowledge and Practice Regarding Post Cardio Pulmonary Resuscitation**

Authors: Rawia Abd El-ghany Mohamed <sup>١</sup> , Ghada.A.Hassan <sup>٢</sup> , Hanan Elsayed Metwally <sup>٣</sup>

### **Abstract:**

**Context:** Successful resuscitation from cardiac arrest results in effective post–cardiac arrest care, which can evolve in the days to weeks after return of sustained circulation. So, electronic learning has grown tremendously and integrated into nursing education and training. **Aim:** Evaluate the effect of electronic learning package application on nurses' knowledge and practice regarding post cardio pulmonary resuscitation for critically ill neonates. **Methods:** A quasi-experimental research design was used to conduct the study. **Setting:** The study was conducted at Neonatal Intensive Care Units of Benha University Hospital at Benha city. **Sampling:** A convenient sample of (٧٠) nurses working at the above-mentioned settings were included in this study regardless of their personal characteristics. **Tools of data collection:** Two tools used, Tool <sup>١</sup>: A structured interviewing questionnaire designed to assess nurses' personal characteristics, personal data of the studied neonates, and nurses' knowledge regarding post cardio pulmonary resuscitation for critically ill neonates. Tool <sup>٢</sup>: An observation checklist to assess nurses' practice regarding post cardio pulmonary resuscitation for critically ill neonates. **Results:** There was a statistical significant positive correlation between total knowledge scores and total practice scores of the studied nurses post electronic learning package application. **Conclusion:** It can be concluded that, electronic learning package application had a positive effect on improvement of nurses' knowledge and practice level, which indicates that, the electronic learning package application is greatly effective. **Recommendation:** The study recommended that, An update electronic learning and training programs should be periodically conducted with numerous teaching methods for staff nurses in NICUs to improve their performance regarding post Cardio Pulmonary resuscitation.

# Effect of Calming Techniques on Health Parameters of Children Undergoing Upper Gastrointestinal Endoscopy and their Mothers' Satisfaction

**Authors:** Rawia Abd El-ghany Mohamed <sup>1</sup>, Ghada.A.Hassan <sup>2</sup>, Hanan Elsayed Metwally <sup>3</sup>

## Abstract:

**Context:** Upper gastrointestinal endoscopy is a critical diagnostic technique for gastrointestinal disorders. Therefore, proper child preparation is highly recommended to maintain the examination more acquainted more comfortable. **Aim:** Evaluating the calming techniques effect on health parameters of children undergoing upper gastrointestinal endoscopy and their mothers' satisfaction. **Research design:** The present study employed a quasi-experimental research design. **Setting:** This study was accomplished at the endoscopy unit at Benha University Hospital in Benha City. **Study sample:** A purposive sample of 106 children and their mothers. **Tools:** Five tools were adopted for data collection, *I:* Structured interview questionnaire sheet; *II:* Child Behavior Checklist; *III:* State Anxiety Scale; *IV:* Children Fear Scale; *V:* Mothers' Satisfaction Questionnaire. **Results:** After the calming technique intervention, it was observed that mild anxiety was prevalent among most children in the study group, in contrast to the control group where the majority of children in control group experienced severe anxiety immediately after calming technique intervention. Moreover, significant statistical differences were observed between the study group and the control concerning physiological parameters. Additionally, over three-quarters of mothers in the study group had an improved satisfaction level concerning upper gastrointestinal endoscopy one hour after upper endoscopy. **Conclusion:** This study could be concluded that calming techniques were effective in improving health parameters among children undergoing upper endoscopy in the study group compared to the control group. Also, mothers of children in the study group who received calming techniques, experienced high satisfaction level. **Recommendation:** Conducting educational programs periodically for nurses in the endoscopy unit concerning the different calming techniques methods that can be applied for children before upper endoscopy.

# Effect of Evidence-Based Guidelines on Nurses' Performance Regarding Care of High-Risk Neonates Undergoing Surfactant Replacement Therapy

**Authors:** Eman A. Samir

١, Faten Sh. Mahmoud

٢, Madiha H. Bayoumi٣

## **Abstract:**

background: The main course of treatment for respiratory distress syndrome includes surfactant replacement therapy (SRT), which prevents alveolar collapse, boosts survival, and lowers respiratory morbidities. Evidence-based nursing guidelines improve neonatal care and bridge the gap between research findings and clinical practice. Aim of the study was to assess the effect of evidence-based guidelines on nurses' performance regarding care of high-risk neonates undergoing SRT. Design: a quasi-experimental research design was utilized to conduct this study. Setting: This study was conducted in Neonatal Intensive Care Unit (NICU) at Benha University Hospital. Sample: A convenient sample of all available nurses (١٤ nurses) who were responsible for providing care to high-risk neonates and purposive sample of high-risk neonates (٣٠ neonates) who receive SRT and admitted to NICUs. Tools of data collection: Two tools were used: Tool (I): A structured interviewing questionnaire sheet to assess characteristics of the studied subjects and nurses' knowledge regarding care of high-risk neonates undergoing SRT. Tool (II): Observational checklists to assess nurses' practices regarding care of high-risk neonates undergoing SRT. Results: The majority of the studied nurses had satisfactory total level of knowledge in post-implementation of guideline, there was an improvement in total nurses practices post-implementation of guideline compared to pre-implementation. Conclusion: The evidence-based guideline was effective in improving nurses' knowledge and practices regarding care of high-risk neonates undergoing SRT post- implementation of guideline. Recommendation: Enhancing nurses' knowledge and practices regarding care of high-risk neonates undergoing surfactant replacement therapy by encouraging them to attend periodical training courses.

# **Barriers Faced by Mothers Caring for their Children with**

## **Leukemia during COVID-19 Pandemic**

**Authors:** Huda El-Sayed Abdel-Haleem<sup>1</sup>, Madiha Hassan Bayoumi<sup>2</sup>, and Rasha Rady El-Said<sup>3</sup>

### **Abstract:**

**Background:** Mothers caring for their children with leukemia during COVID-19 pandemic are facing several barriers. Leukemia is the most common childhood cancer, accounting for more deaths in developed nations than any other illness. **Aim of the study:** Was to assess barriers faced by mothers caring for their children with leukemia during COVID-19 pandemic. **Setting:** This study was carried out in Pediatric Oncology Inpatient Department at Benha Specialized Pediatric Hospital affiliated to Specialized Medical Centers Secretariat. **Design:** A descriptive quantitative study design was utilized. **Subjects:** A purposive sample of 91 mothers and their children aged from 0 to 16 years old with leukemia. **Tools of data collection:** Tool I: A structured interviewing questionnaire used to assess; personal characteristics of the studied mothers, personal characteristics of the studied children and mothers' knowledge about childhood leukemia and COVID-19 pandemic. Tool II: Interviewing questionnaire sheet regarding barriers faced by mothers caring for their children with leukemia during COVID-19 pandemic. **Results:** Less than half of the studied mothers had inadequate knowledge about childhood leukemia and more than half of them had inadequate knowledge about COVID-19 pandemic. Meanwhile, social related barriers were the major barrier constituting about more than two thirds. While, the less barriers faced by mothers were major hospital related barriers constituting about more than half. **Conclusion:** There was a highly statistical significant negative correlation between total barriers faced by mothers caring for their children with leukemia during COVID-19 pandemic and their total knowledge level about COVID-19. **Recommendations:** Designing and implementing an educational program for mothers about COVID-19 and its effects on children with leukemia and COVID-19 vaccination for children with leukemia.

# **Nurses' knowledge, Practice and Attitude regarding Endotracheal Tube Fixation: An Assessment Study**

**Authors:** Noura Elbasiony Elmohamady<sup>1</sup>, Basma Rabie Abd El-Sadik<sup>2</sup> and Yasmin Abd El-Ghany Abd El-Fatah

## **Abstract:**

Background: Endotracheal intubation is a medical procedure in which a tube is placed into the trachea through the mouth or nose. The tube can then be connected to a mechanical ventilator to assist breathing and maintain an open airway. Aim of the study: Was to assess nurses' knowledge, practice and attitude regarding endotracheal tube fixation. Design: A descriptive, assessment research design was utilized to carry out this study. Settings: This study was carried out at Pediatric Intensive Care Units of Specialized Pediatric Hospital in Benha City which affiliated to ministry of health and population and Benha University Hospital. Subjects: A convenient sample of (100) nurses who were responsible for care of infants with endotracheal tube and a purposive sample of (100) infants who are undergoing endotracheal intubation in the previously mentioned settings. Tools of data collection: Three tools were utilized to collect data for the study: Tool (I): A structured interviewing questionnaire sheet. Tool (II): An observational checklist to assess nurses' practices regarding endotracheal tube fixation. Tool (III): Nurses' attitude regarding endotracheal tubation fixation. Results: More than two fifths of studied nurses had an average level of knowledge, more than half of them had incompetent level of practice and more than two thirds of them had positive attitude regarding endotracheal tube fixation. Conclusion: There was a positive correlation between total nurses' knowledge, total practice and total attitude regarding endotracheal tube fixation. Recommendation: Developing training programs regarding endotracheal tube fixation are recommended for the nurses working in pediatric intensive care units to improve their knowledge, practice, and attitude.

# **Effect of Educational Module on Improving School-Age Children and their Parent's Knowledge and Behavior Intervention about Nocturnal Enuresis**

**Authors:** Hwaida.Ali

## **Abstract:**

Background: Nocturnal enuresis can affect negatively on the familial quality of life. Therefore, parents and their children should be educated about intervention to overcome these disorders. The aim: Evaluate the effect of educational module on school age children and their parent's knowledge, and behavior intervention about nocturnal enuresis. Design: The study utilized a quasi-experimental research design. Setting: Outpatient clinic affiliated to the Specialized Pediatric Hospital at Benha City. Sample: A purposive sampling technique was used consisted of sixty school age children diagnosed by nocturnal enuresis and their parent. The tool of data collection: Tool I: A structured interviewing questionnaire about characteristics of children and their parents, the pattern of enuresis and knowledge of school-age children and their parent about nocturnal enuresis. Tool II: Behaviour intervention. Results: 81,7% of the school-age children with enuresis were female and 83,3% of them were living in urban, 46,7% were taken last drink before sleep. 81,7% of school-age children have had no family history of nocturnal enuresis. 86,7% of children and 90% of parent have satisfactory knowledge post program implementation. Also, 70,0% of children and 77,0% of parent have appropriate behavior about nocturnal enuresis post program implementation. Conclusion: The educational module program was influenced positively in improving school-age children and their parent's knowledge and behavior intervention about nocturnal enuresis. Recommendations: Updates and continuous counseling program for parent and their children with nocturnal enuresis are critical to improve their knowledge, early detect and intervention to avoid the negative consequences of nocturnal enuresis.

# **Nurses' Knowledge and Practices regarding Venous Blood Sampling Withdrawal in Neonates**

**Authors:** Aya Atef Hussien Ibraheem<sup>1</sup>, Basma Rabie Abd El-sadik<sup>2</sup> and Rawia Abd El- ghany Mohamed

## **Abstract:**

Background: Venous blood sampling withdrawal considered the most common procedures that performed in neonatal intensive care unit. So, the nurse play an important role in eliminating of problems which may occur and collaborating with other health professionals in handling the plan of care. Aim: This study aimed to assess nurses' knowledge and practices regarding venous blood sampling withdrawal for neonates at neonatal intensive care unit. Research design: A descriptive design was utilized to conduct this study. Setting: This study was conducted at neonatal intensive care units in Benha University Hospital. Subjects: A convenient sample of (V•) nurses and a convenience sample of (V•) neonates who are undergoing venous blood sampling withdrawal. Tools of data collection: Two tools were used Tool (I): A structured interviewing questionnaire sheet to assess nurses' knowledge regarding venous blood sampling withdrawal for neonates. Tool (II): An observational checklist to assess nurses' practices regarding venous blood sampling withdrawal for neonates. Results: Less than half of the studied nurses had good knowledge and majority of them had competent level of practice regarding venous blood sampling withdrawal. Conclusion: There was a positive correlation between nurses' total knowledge and their total practices regarding venous blood sampling withdrawal in neonates. Recommendation: Developing periodic training programs for nurses regarding care of neonates undergoing venous blood sampling are recommended to update their knowledge.

# **Effect of Designed Nutritional Guidelines on Nurses' Performance regarding Feeding of Low Birth-Weight Infants**

**Authors:** Marwa Talat Ghoneim <sup>١</sup> , Khadegia Mohamed Said <sup>٢</sup> and Seham Mohammed Abd El aziz <sup>٣</sup>

## **Abstract:**

**Background:** Low birth weight is one of the most serious challenges in maternal and child health in both developed and developing countries. **Aim of the study:** The study aimed to evaluate the effect of designed nutritional guidelines on nurses' performance regarding feeding of low birth weight infants. **Design:** A quasi-experimental design was used in the current study. **Settings:** This study was conducted at Neonatal Intensive Care Unit at Benha University Hospital and Benha Specialized Pediatric Hospital at Benha city. **Sample:** A convenient sample of nurses included (٨٠) nurses working in the previous mentioned settings and a purposive sample(٨٠) of low birth weight infants. **Tools of data collection:** Three main tools were used, tool I: A structured interviewing questionnaire. tool II: Observational check lists. tool III: Neonatal medical assessment sheet. **Results:** More than half of nurses had unsatisfactory level of knowledge and more than one third of them had incompetent level of practices before designed guidelines intervention, while the majority of nurses had satisfactory knowledge and of them had competent level of practice after designed guidelines intervention. **Conclusion:** The designed nutritional guidelines was effective in improving nurses' knowledge and their practices level regarding feeding low birth weight infants and improving physiological status of low birth weight infants. **Recommendations:** Provision of continuous designed guidelines in order to update nurses' knowledge and enhance their practices related to feeding of low birth weight infants.

# **Effect of Post-Operative Protocol of Feeding for Nurses on Improving Nutritional Outcomes of Infants with Congenital Heart Diseases**

**Authors:** Walaa Abdelkhalek Elsayed<sup>1</sup>, Fawzia Elsayed Abosaad<sup>2</sup>, Madiha Hassan Bayoumy<sup>3</sup> and Seham Mohammed Abdelaziz

## **Abstract:**

**Background:** Congenital heart disease is the most common major birth defect in infants. **Aim of study:** Was to evaluate the effect of post-operative protocol of feeding for nurses on improving nutritional outcomes of infants with congenital heart diseases. **Design:** A quasi-experimental design was used in the current study. **Setting:** The present study was conducted in the Pediatric Cardiac Care Unit and Surgical Intensive Care Unit at Specialized Pediatric Hospital at Benha City. **Subjects:** A convenient sample of (60) nurses who working at the previously mentioned setting included in the study and a purposive sample of (100) infants who had congenital heart disease post-operatively. **Tools of data collection:** Tool (I): A structured interviewing questionnaire sheet consists of part (I): personal characteristics of the studied nurses, part (II): Nurse's knowledge regarding congenital heart disease, and part (III): Nurse's knowledge regarding post-operative feeding for infants with congenital heart disease. Tool (II): An observational checklist to assess nurses' practices. Tool (III) Infant Nutritional Outcomes: consists of Part (I): Personal characteristics of the studied infants, Part (II): Infant health assessment sheet and Part (III): nutritional outcomes. **Results:** Most of the studied nurses had good knowledge level and had competent practice in post protocol of feeding implementation. One third of infants stayed in hospital for a period 1-3 days pre-program implementation compared to less than three quarters post protocol of feeding implementation. There was high statistically significant difference in the total mean of weight gain of infants pre and post protocol of feeding implementation. **Conclusion:** Protocol of feeding was effective in improving nurses' performance regarding effect of post-operative protocol of feeding for nurses on improving nutritional outcomes of infants with congenital heart diseases. There was high statistically significant difference in the total mean of weight gain of infants pre and post protocol of feeding implementation. **Recommendation:** Conducting regular training program and workshops for nurses regarding improving nutritional outcomes of infant post-operative with congenital heart disease.

# **Effect of Clinical Pathway on Nurses' Performance and Neonates Outcomes regarding Noninvasive Continuous Positive Airway Pressure**

**Authors:** Nessma Mohamed Attia ,Hanan Elbahnasawy, Basma Rabie Abd El- Sadelk and Seham Mohammed Abd. ElAziz

## **Abstract:**

Background: Noninvasive continuous positive airway pressure is a means of providing respiratory support to neonates vulnerable to respiratory problem and complications. Clinical pathway provide detailed guidance for each stage in the management of neonates with a specific condition over a given time period and include progress and outcomes details. Aim of the study Was to evaluate the effect of clinical pathway on nurses' performance and neonates outcomes regarding noninvasive continuous positive airway pressure. Design: A quasi- experimental design was used in the current study. Setting: The study was carried out at Neonatal Intensive Care Units at Benha University Hospital and Benha Specialized pediatric Hospital at Benha city. Subjects: All available nurses (٦٠) nurses who are working at previously mentioned settings and a purposive sample of (٦٠) neonates on noninvasive continuous positive airway pressure. Tools of data collection: Tool (I): A structured interviewing questionnaire format including subjects' characteristics and nurses' knowledge regarding care of neonates undergoing noninvasive continuous positive airway pressure. Tool (II): Assessment sheet of medical outcome for neonates. Tool (III): Clinical pathway checklists. Results: The majority of studied nurses had a poor level of knowledge at pre-clinical pathway intervention compared with most of them had a good level of knowledge post clinical pathway intervention map for care of neonates, most of studied nurses had incompetent practice level pre clinical pathway intervention compared with more than three quarters had competent practice level regarding post clinical pathway intervention, there was a decrease in length of hospital stay after clinical pathway intervention, this may be due to improvement of health status of neonates due to effect of clinical pathway. Conclusion: Implementation of clinical pathway improved nurses' knowledge and practice that reflecting obvious improvement in clinical outcomes of neonates undergoing noninvasive continuous positive airway pressure. Recommendations: Provision of continuous education by using clinical pathway to update nurses' knowledge and enhance their practices regarding care of neonates on noninvasive continuous positive airway pressure.

# Effect of Educational Intervention on Quality of Life for Mothers' Having Children with Ventriculoperitoneal Shunt

**Authors:** Samah Mahmoud Mohamed Abd-EL Baky<sup>1</sup> , Sabah Saad Al Sharkawi<sup>2</sup> , Faten Shafik Mahmoud<sup>3</sup> and Seham Mohammed Abdelaziz

## Abstract:

**Background:** Abnormalities of the genitourinary system account for the majority of urogenital disorders in children. External genitourinary malformations are easily identified at birth, while internal defects can be specific when symptoms develop in late infancy. **Aim of study:** Was to evaluate the effect of maternal preoperative guidelines for surgical recovery of urogenital abnormalities on the child's surgical outcome. **Research design:** Quasi-experimental design was used in the study. **Setting:** The study was conducted at Benha Specialized Hospital for Children affiliated to Ministry of Health and Population. **Sample:** 60 mothers with their children were included in the study. **Tools of data collection:** Included three tools , **Tool (I)** ; Structured Interviewing Questionnaire Sheet to assess personal characteristics of mothers and children, mother's knowledge regarding to care of their children undergoing surgical repair of genitourinary anomalies, **Tool (II)** : Assessment Sheet to assess mother's practical knowledge regarding to care of their children undergoing surgical repair of genitourinary anomalies, **Results:** There was highly significant improvement in the studied mothers' total level of knowledge (98.8% had satisfactory knowledge) and total practice post implementation. **Conclusion:** There is a highly significant positive correlation between mothers' total knowledge and their total practice scores regarding genito-urinary anomalies. **Recommendations:** Providing sufficient training for mothers' pre operative instructions regarding to surgical repair of genitourinary anomalies on their children postoperative outcomes to enhance their knowledge and practice.

# **Nurses' Performance regarding Preventive Measures of Pressure Ulcer among Critically Ill Children at Pediatric Intensive Care Units**

**Authors:** Angham Hamdy Abd Elkhalek<sup>1</sup>, Faten Shafik Mahmoud<sup>2</sup> and Khadiga Mohamed Said<sup>3</sup>

## **Abstract:**

Background: Critically ill children require serious consideration whether in medical, surgical or trauma- related fields. Pressure ulcer are a challenging problem in the care of medically complex children. Nurses are dedicated to the prevention and management of pressure injuries. Aim of the study: Was to assess nurses' performance regarding preventive measures of pressure ulcer among critically ill children at pediatric intensive care units. Research design: A descriptive research design was used to conduct the current study. Settings: The study was conducted at pediatric intensive care units of Benha University Hospital and Benha Specialized Pediatric Hospital. Subjects: A convenient sample of 100 nurses and a purposive sample of 50 children were selected from the previously mentioned settings. Tools: Data was collected by using three tools, Tool (I): A structured interviewing questionnaire format to assess personal characteristics of nurses and children and assess Nurses' knowledge regarding pressure ulcer prevention, Tool (II): Braden Q Risk Assessment Scale, It was used to predict pressure ulcer risk for critically ill children and Tool (III): Observational checklist to assess nurses' practice regarding pressure ulcer prevention. Results: Most studied nurses had poor level of knowledge regarding pressure ulcer, incompetent practices towards prevention of pressure ulcer. Conclusion: There was a positive statistically significant correlation between total nurses' knowledge and total practices regarding preventive measures of pressure ulcer. Recommendations: Pediatric nurses should update their knowledge and practice about preventive measures of pressure ulcer through training, educational program, workshops and empower nurses to apply preventive measures of pressure ulcer assessment and urgent intervention in work areas.

# **Nurses' Performance regarding Care of Infant Suffering from Hypoxic Ischemic Encephalopathy: An Educational Program**

**Authors:** Reem Sallam Mahmoud<sup>1</sup>, Faten Shafik Mahmoud<sup>2</sup> and Amal Gharib Sabaq<sup>3</sup>

## **Abstract:**

Background: Hypoxic-ischemic encephalopathy is one of the most common causes of cerebral palsy and other severe neurological deficits in children which occurs in 1,0/1,000 live births. It is caused by inadequate blood flow and oxygen supply to the brain resulting in focal or diffuse brain injury. Aim: This study aimed to evaluate the effect of educational program on nurses' performance regarding infant suffering from hypoxic ischemic encephalopathy. Method: A quasi-experimental design was utilized to conduct this study. Setting: The study was conducted in the pediatric intensive care unit and neonate intensive care unit department at Specialized Pediatric Hospital which affiliated to Egyptian Ministry of Health and Population. Subjects: A convenient sample of 70 nurses and purposive sample of 70 infants. Tools: Three tools were used to collect data: A structured interviewing questionnaire sheet, an observation checklist and nurses' attitude scale Results: Less than half, less than one third and more than one third respectively of nurses had poor knowledge, incompetent practices and negative attitude levels pre- program implementation. While, the majority of them had good knowledge, competent practices and positive attitude levels post- program implementation. Conclusion: The educational program had a significant positive effect in improving nurses' performance regarding care of infant suffering from hypoxic ischemic encephalopathy. Besides, there was a highly statistical significant positive correlation between total nurses' practices, total knowledge and total attitude scores post program implementation. Recommendations: Designing a simplified comprehensive Arabic guided booklet about hypoxic ischemic encephalopathy must be available in all pediatric intensive care unit and neonate intensive care unit.

# Health beliefs of Mothers towards Prevention of Rickets among their Children

**Authors:** Amira Saied Mahmoud Mohamed \ , Amal Gharib Sabaqȳ and Hanan Nabawy-Elasserȳ

## Abstract:

**Background:** Rickets considered a major worldwide health issue around the world. It is a preventable condition, but cases continue to be reported in infants and children due to lack of mothers' awareness about the importance of vitamin D, benefits and prevention of deficiency. **Aim:** This study aimed to assess health beliefs of mothers towards prevention of rickets among their children. **Design:** A descriptive study design was utilized to conduct this study. **Settings:** This study was conducted at outpatient pediatric clinics in Benha university hospital and Benha teaching hospital affiliated to Egyptian Ministry of Health and Population. **Sample:** A convenient sample of all available mothers were taken from the previously mentioned setting regardless of their characteristics and willing to participate in the study. **Tool:** Two tools were used for data collection: A structured interviewing questionnaire and mother's health beliefs scale. **Results:** The majority of the studied mothers has unsatisfactory level of knowledge scores about prevention of rickets in children and less than two thirds of the studied mothers have moderate level of health beliefs. **Conclusion:** There was a highly statistical significant relation between the studied mother's total knowledge level and the total mother's health beliefs level with their characteristics. **Recommendation:** Provide continuous educational programs based on the health belief model to enhance mother's knowledge about prevention of rickets.

# **Effect of Simulative Heartbeat Nest on Improving Physiological Parameters, Comfort and Pain of Preterm Neonates at Neonatal Intensive Care Unit**

**Authors:** Yasmine Abd ELGhany - Abd EL-Fatah \ and Reda Abd EL Mohsen MahmoudY

## **Abstract:**

**Background:** It was estimated that 10 million preterm neonates were born worldwide each year, with over one million of those neonates dying as a result of prematurity. The aim of developmentally supportive care is to create a womb out of womb which improve comfort of the preterm neonates in the Neonatal Intensive Care Unit. **Aim of this study** was to assess the effect of simulative heartbeat nest on improving physiological parameters, comfort and pain of preterm neonates at neonatal intensive care unit. **Research design:** A quasi experimental design was utilized in this study. **Setting:** This study was conducted at neonatal intensive care unit in Specialized Pediatric Hospital at Benha City. **Subjects:** Purposive sample of preterm neonates (10) at neonatal intensive care was involved. **Tools of data collection Tool (I): A structured interviewing questionnaire:** It included three parts: **Part (1):** Personal characteristics of the studied preterm neonates. **Part (2):** Physical parameters of preterm neonates. **Part (3):** Physiological measurements of the studied preterm neonates. **Tool (II):** Premature baby comfort scale. **Tool (III):** Premature baby pain profile (PIPP-R). **Results:** There were a highly statistically significant difference (P-value < 0.001) between premature neonates in study/control group at the pre/post using of simulative heartbeat nest concerning their comfort, physiological parameters and pain score. **Conclusion:** It was concluded that using of simulative heartbeat nest was a highly effective method to improve physiological parameters, comfort and pain of preterm neonates. **Recommendations:** Implementing strategies of developmentally supportive care like nesting that mimic the intrauterine environment in the NICU that improves preterm neonate's state of alertness, posture, comfort and stable physiological parameters.

# Nurses' Knowledge and Practices regarding Hypothermia for Preterm Infants

**Authors:** Amany Ali Abd El sattar Belal<sup>١</sup>, Amal Gharib Sabaq<sup>٢</sup> and Rawia Abd El-ghany<sup>٣</sup> (١)

## Abstract:

Background: Hypothermia is a major factor in infant's morbidity and mortality in developing countries. So, maintaining normal body temperature in preterm infants is crucial. Aim of study: The aim of this study was to assess nurses' knowledge and practices regarding hypothermia for preterm infants. Design: A descriptive design was utilized to conduct this study. Settings: This study was carried out in neonatal intensive care units of Benha University hospital, and Benha Specialized Pediatric Hospital at Benha city. Sample: A convenient sample of ١٥٠ nurses and ٢٠٠ preterm infants were taken from the previous mentioned hospitals. Tools of data collection: Two tools were used: tool (١): Arabic structured interviewing questionnaire and tool (٢): An observational check list. Results: Slightly more than one third of the studied nurses were in age groups less than ٣٠ years with mean  $\pm$  SD (٣٣,١٦ $\pm$ ٨,٠٤) years old, two fifth of the studied nurses have diploma of technical institute of nursing and have experience equal ١٥ years or more. More than half of the studied nurses had average knowledge level regarding hypothermia and more than two thirds of them had poor practices. Conclusion: There was a highly statistically significant relation between total nurses' knowledge and practices regarding prevention of hypothermia with their characteristics. Again, there was a highly statistically significant positive correlation between the studied nurses' total knowledge scores and their total practices scores. Recommendations: The importance of developing periodical training programs for all nurses working at Neonatal Intensive Care Units regarding care of preterm infants with hypothermia to update their performance.

## **Parent's Stress and Quality of Life for Children Diagnosed with Autism**

### **Authors:**

### **Abstract:**

Parents of children with ASD are at risk for chronic stress due to challenging parenting. It is unknown whether stress is already present in early parenthood, similar for mothers and fathers and if this impacts quality of life (QoL). Parental stress and QoL were assessed in 106 mothers and 106 fathers of young children (aged 3 to 6) with autism. Associations between parental stress (OBVL) and QoL (WHOQoL-BREF) were examined. Parents of young children with ASD appear to have high parental stress from conflicting feelings towards their child and from difficulties with parenting. Mothers have higher stress from feeling confined in their motherly role than fathers compared to the OBVL norm population. Both mothers and fathers have a low QoL. Increased maternal conflicting feelings towards the child associated with lower psychological QoL, while high maternal feelings of role confinement associated with low physical QoL. Increased paternal conflicting feelings towards their child related to lower physical and social QoL, while fathers with more parenting difficulties reported less satisfaction with their psychological and environmental wellbeing. Thus, already at young age, parenting children with ASD is a major challenge for both mothers and fathers.

# Effect of Education Guidelines on Nurses' Performance toward Neonates Suffering from Meconium Aspiration Syndrome

**Authors:** Fatma Radwan Abdelhamed, Fawzia El Said Abo El Saad, Madiha Hassan Bayoumi and Rawia Abd El-ghany Mohamed

## Abstract:

**Background:** Meconium Aspiration Syndrome is defined as well as respiratory distress in neonates born through meconium stained amniotic fluid whose symptoms cannot be otherwise explained. The nurse role is assessing the signs of distress, keep normal temperature, prevent aspiration, and observe for complications. This study **aimed** to evaluate the effect of educational guidelines on nurses' performance toward neonates suffering from meconium aspiration syndrome. **Design:** A quasi- experimental design was used in the current study. **Settings:** The study was conducted in Neonatal Intensive Care Units at Specialized Pediatric Hospital at Benha City, Egypt. **Study subjects:** A convenient sample of (62) nurses and a purposive sample of (62) neonates suffering from meconium aspiration syndrome and need hospitalization. **Tools of data collection: Tool (I):** A structured interviewing questionnaire sheet consists of **Part (A):** Personal characteristics of the studied nurses, **Part (B):** Personal characteristics of the studied neonates and **Part (C):** Nurses' knowledge regarding meconium aspiration syndrome. **Tool (II):** An observational checklist to assess nurses' practices. **Results:** Majority of the studied nurses had good level of total knowledge in post-educational guidelines compared to pre-educational guidelines implementation. Also, the majority of the studied nurses had competent level of total practice in post educational guidelines. **Conclusion:** The educational guidelines were effective in improving nurses' knowledge and practice regarding care of neonates with meconium aspiration syndrome. There was a positive correlation between nurses' total level of knowledge and practices pre and post educational guidelines implementation. **Recommendation:** Conducted regular training programs and workshops for nurses regarding care of neonates with meconium aspiration syndrome.

# **Barriers Faced by Mothers Caring for their Children with Leukemia during COVID-19 Pandemic**

**Authors:** Huda El-Sayed Abdel-Haleem<sup>1</sup>, Madiha Hassan Bayoumi<sup>2</sup>, and Rasha Rady El-Said<sup>3</sup>

## **Abstract:**

Background: Mothers caring for their children with leukemia during COVID-19 pandemic are facing several barriers. Leukemia is the most common childhood cancer, accounting for more deaths in developed nations than any other illness. Aim of the study: Was to assess barriers faced by mothers caring for their children with leukemia during COVID-19 pandemic. Setting: This study was carried out in Pediatric Oncology Inpatient Department at Benha Specialized Pediatric Hospital affiliated to Specialized Medical Centers Secretariat. Design: A descriptive quantitative study design was utilized. Subjects: A purposive sample of 91 mothers and their children aged from 0 to 16 years old with leukemia. Tools of data collection: Tool I: A structured interviewing questionnaire used to assess; personal characteristics of the studied mothers, personal characteristics of the studied children and mothers' knowledge about childhood leukemia and COVID-19 pandemic. Tool II: Interviewing questionnaire sheet regarding barriers faced by mothers caring for their children with leukemia during COVID-19 pandemic. Results: Less than half of the studied mothers had inadequate knowledge about childhood leukemia and more than half of them had inadequate knowledge about COVID-19 pandemic. Meanwhile, social related barriers were the major barrier constituting about more than two thirds. While, the less barriers faced by mothers were major hospital related barriers constituting about more than half. Conclusion: There was a highly statistical significant negative correlation between total barriers faced by mothers caring for their children with leukemia during COVID-19 pandemic and their total knowledge level about COVID-19. Recommendations: Designing and implementing an educational program for mothers about COVID-19 and its effects on children with leukemia and COVID-19 vaccination for children with leukemia.

# Effect of Educational Intervention on Nurses' Performance Regarding Care of Critically Ill Children with Pneumothorax

**Authors:** Amal Abdel-Fatah Abdel-Mohsen Mohamed <sup>1</sup>, Faten Shafik Mahmoud <sup>2</sup> and Amal Abdel Aziz Abdel Salam<sup>(1)</sup>

## Abstract:

Background: Pneumothorax is an urgent and undesirable state of air penetration into the virtual space between two lists of pleura resulting in a collapsed lung and loss of negative intrathoracic pressure. The nurse must be equipped with appropriate knowledge and skills to meet the needs of children with pneumothorax safely and competently. This study aimed to: Evaluate effect of educational intervention on nurses' performance regarding care of critically ill children with pneumothorax. Design: A quasi- experimental design was used in the current study. Setting: The present study was conducted at Pediatric Intensive Care Unit, Cardiothoracic Intensive Care Unit and Emergency Intensive Care Unit at Benha University Hospital Subjects: A convenient sample of (100) nurses who working at the previously mentioned setting included in the study and a purposive sample of (50) child who suffering from pneumothorax. Tools of data collection: Tool (I): A structured interviewing questionnaire sheet consists of part (1): Personal data of the studied nurses and part (2): Nurses' knowledge regarding care of critically ill children with pneumothorax. Tool (II): Attitudes Likert scale to assess nurses' attitudes regarding care of critically ill children with pneumothorax. Tool (III): Observational checklists to assess nurses' practices regarding care of critically ill children with pneumothorax. Tool (IV): Chest tube associated complications assessment sheet to assess chest tube associated complications. Results: This study revealed that, the majority of the studied nurses had good knowledge, positive attitudes and competent practices in post educational intervention. Conclusion: Educational intervention had positive effect on the nurses' performance (knowledge, attitudes and practices) and reducing chest tube associated complications. Recommendation: Providing up-to-dated, regular and continuous in-services training programs about pneumothorax and chest tube for nurses.

# **Effect of Educational Program on Pediatric Nurses' Performance regarding to COVID-19**

**Authors:** Eman Ali Saad Hekal <sup>1</sup> , Faten Shafik Mahmoud <sup>2</sup> and Madiha Hassan Bayoumi <sup>3</sup>

## **Abstract:**

Background: COVID-19 is the disease caused by a new corona virus called SARS-CoV-2. Nurses has critical role and responsibility during COVID-19 pandemic. Aim of the study: This study aimed to assess effect of educational program on pediatric nurses' performance regarding to COVID-19. Research Design; A quasi experimental design was utilized in the study. Settings; This study was conducted at the isolation department and Intensive Care Unit (ICUs) at Benha Specialized Pediatric Hospital. Subject; A convenient sample included all available nurses (60) who working in the previously mentioned settings. Tools of data collection; Tool (I): Structure interviewing questioner to assess nurses' characteristic and knowledge regarding COVID-19. Tool (II): Observational checklist to assess nurses' practice regarding COVID-19. Tool (III): Nurses attitude regarding COVID-19 to assess nurses' attitude regarding to COVID-19. Results: There were statistically significant differences between the level of knowledge, practices and attitudes of pediatric nurses, their qualifications and years of experience before and after implementing the program. Also, there was positive correlation between pediatric nurses' knowledge, practice and attitude scores pre and post implementation of the educational program Conclusion: The educational program was effective in improving the level of pediatric nurse's performance regarding to COVID-19. Recommendation: Emphasizing on the importance of developing periodical training programs regarding care of children with corona virus for nurses working in intensive care unit and isolation department to improve their performance.

# Improving Quality of Life of Mothers and their Children with Immune Thrombocytopenia

**Authors:** Marwa Samir Said Saleh<sup>1</sup>, Khadiga Mohamed Said Abd El-Motaleb<sup>2</sup> and Rasha Rady ElSaid<sup>3</sup> (1)

## Abstract:

**Background:** Immune thrombocytopenia is an autoimmune disease characterized by a low platelet count (less than  $100 \times 10^9/L$ ) and pediatric patients may develop bruising or mucosal bleeding. The concept of health-related quality of life was first proposed decades ago and has been successfully applied in a variety of contexts. **Aim:** This study aimed to improve the quality of life of mothers and their children with immune thrombocytopenia. **Design:** A quasi-experimental design was utilized. **Setting:** The study was conducted at Benha Specialized Pediatric Hospital which affiliated to secretariat of specialized medical centers (in outpatient clinics and hematology ward) at Benha city. **Sample:** A purposive sample of children with Immune thrombocytopenia aged from 3 to less than 14 years and their mothers were recruited. **Tools of data collection:** Four tools were used to conduct the study. **Tool (I):** Structured Interviewing Questionnaire which included 3 parts; **Part (1)** Personal characteristic of studied mothers. **Part (2):** Mother's knowledge regarding ITP. **Tool (II):** Medical Data Sheet which included 3 parts; **Part (1):** Personal data of the studied children. **Part (2):** Previous and current medical history. **Tool (III):** Mothers' reported practice to assess mothers' care given to their children with immune thrombocytopenia which include nose bleeding, wound care, bathing, teeth brushing, mouth care, skin care and hair care and administration of oral medications. **Tool (IV):** Scale of pediatric quality of life (Kids ITP tools) to assess the quality of life of children with Immune thrombocytopenia. **Results:** Less than quarter (23.0%) of the studied mothers had satisfactory level of reported practice in pre-guidelines phase, while (86.0% & 80.0%) of them had satisfactory level of reported practice toward improving the quality of life of their children with thrombocytopenia in post-guidelines and at follow-up phase. Mean child scores of PedsQL was  $48.1 \pm 14.93$  pre guidelines and  $60.3 \pm 11.22$  post guidelines phase. Less than half (40.0%) of the studied children had positive quality of life in pre-guidelines phase, while (68.0% & 64%) of them had positive quality of life in post-guidelines phase and follow-up phase. **Conclusion:** The designed guidelines succeed to improved mother's knowledge and reported practice regarding ITP and children's quality of life. **Recommendations:** More researches are required for training of mothers, about the proper care of children with immune thrombocytopenia and raising their awareness about the nature of disease and right practices should be done in daily different situations.

# Effect of Educational Guidelines on Nurses' Performance regarding Safe Use of High Alert Medications at Pediatric Intensive Care Units

## Authors:

## Abstract:

**Background:** High-alert medications are most likely to significantly harm the children when improperly used as, the consequence of an error with these medications are significantly worse for children. So, nurses should be aware about dealing with these medications safely. **The study aim** was to evaluate the effect of educational guidelines on nurses' performance about safe use of high alert medications at pediatric intensive care units. **Study design:** A quasi- experimental approach with pre and post intervention. **Sample:** A convenient sample of all available nurses (n=٦٦) and purposive sample of children (n=٦٦) at Pediatric Intensive Care Units in Benha University Hospital and Benha Specialized Pediatric Hospital. **Tools of data collection: Tool (I): A structured interviewing questionnaire sheet:** It consisted of Part A: Personal characteristics of studied sample that include: ١- The studied nurses, ٢- Children, Part B: Nurses' knowledge regarding safe use of high alert medications. **Tool II:** An Observational Checklist used to assess nurses' practice about safe use of high alert medications. **Tool III:** Likert scale for nurses' attitude regarding safe use of high alert medications in children. **Result:** There was a highly statistically significance of studied nurses' knowledge, practice and attitude regarding safe use of high alert medications in PICU at pre and post educational guidelines phases ( $p < ٠,٠٠٠$ ). **Conclusion:** Implementation of educational guidelines strengthened nurses' performance regarding safe use of high alert medications. **Recommendations:** Establishing standardized guidelines for nurses regarding safe use of high alert medications that should be available in each hospital to enhance nurses' performance at PICU.

# **Effect of Educational Program Based on the Precede-Proceed Planning Model on Quality of Life of Children with Thalassemia**

**Authors:** Hanan Nabawy Elaa s a r \ , Hanaa Tharwat Mohamed El Shahat \ and Reda Mohamed Abdouallah \

## **Abstract:**

Background: Thalassemia is an inherited blood disorder affecting hemoglobin synthesis that can negatively affect the quality of life of children as a result of the disease and it's provided treatment. Aim of the study was to evaluate the effect of educational program based on the precede proceed planning model on quality of life of children with thalassemia. Design: A quasi experimental design was used. Setting: This study was conducted at Pediatric Hematology Unit and Pediatric Hematology out-Patient Clinic at Benha Specialized Pediatric Hospital affiliated to Egyptian Ministry of Health and Population and Secretary of Specialized Medical Centers at Benha City. Subjects: A purposive sample of 120 children. Tools of data collection: Two tools were used; Tool I: A structured interviewing questionnaire based on precede-proceed planning model involving five parts; Part (1) Characteristics of the studied children, Part (2) Medical history of the studied children, Part (3) Predisposing factors assessment questionnaire, Part (4) Reinforcement factors assessment questionnaire and Part (5) Enabling factors assessment questionnaire, Tool II: Pediatric Quality of Life Inventory Generic core scale. Results: Less than one quarter and less than three quarters of studied children had high quality of life at pre-and post-intervention phases respectively. While, less than one quarter and 12,8% of them had low quality of life pre and post intervention respectively. Conclusion: Children with thalassemia had higher quality of life scores after implementation of the program based on the precede-proceed planning model. Recommendations: Integrating of the precede-proceed planning model in designing intervention programs in pediatric hematology units.

# Nurses' Performance Regarding Gravity Gavage Way Versus Injection Force on Gastric Residual Volume Among Preterm Infants in NICU

**Authors:** Doaa Mohamed Mostafa, ʘ Amal Abd-El-Aziz Abd-El-Salam and ʘ Esraa Gamal Mohamed ( ʘ )

## Abstract:

**Background:** Gavage feeding is a common method of feeding preterm infants due to their immature sucking reflex. Gavage feeding performed on preterm infants in different ways, including continuous and intermittent bolus gavage, by using force of gravity or injection with a syringe **Aim:** evaluate the effect of nurses' performance regarding gravity gavage and injection force ways on gastric residual volume. **Design:** A quasi-experimental design. **Settings:** The study was conducted in the NICU department at Benha University Hospital, Benha Teaching Hospital and Specialized Pediatric Hospital. **Subjects:** A convenient sample of 100 nurses and purposive sample of 60 preterm infants. **Tools I:** A structured Interviewing questionnaire sheet consisted of 4 parts: Part 1, personal characteristics of nurses. Part 2, preterm infants' characteristics. Part 3, feeding assessment sheet. Part 4, nurses' knowledge regarding gavage feeding in preterm infants. **Tools II:** An observation checklists sheet **Tool III:** Assessment sheet for gastric residual aspiration. **Results:** More than half of the studied nurses had an incompetent level of practice, and (52.0%) of them had a good level of knowledge with highly statistically significant difference. **Conclusion:** there was a highly statistically significant positive correlation between nurses' performance regarding gavage feeding by injection force way and gastric residual volume. While there was negative correlation between gavage feeding by gravity way and gastric residual volume. **Recommendations:** Implementation of training programs for nurses regarding gavage feeding methods and their effect on gastric residual.

# Effect of an Educational Program on Nurses' Performance Regarding Care Provided for Neonates with Hypoglycemia at Neonatal Intensive Care Units

**Authors:** Manar Antar Amir Said<sup>1</sup>, Hanan Nabawy ELaasar<sup>2</sup> and Yasmin Abdel- Ghany Abdel-fatah<sup>3</sup>

## Abstract:

**Background:** The most frequent metabolic abnormality seen in newborns is hypoglycemia. A major problem in the treatment of the newborn is screening at-risk newborns and managing low blood glucose levels in the first few hours to days of life. Muscle weakness, glycogen depletion, brain energy failure and decreased glucose production are all consequences of severe glucose deprivation. The preservation of the supply of glucose to all organs is a crucial physiological process. **The study aim was to:** Evaluate the effect of an educational program on nurses' performance regarding care provide for neonates with hypoglycemia at neonatal intensive care units. **Research design:** A quasi-experimental design was utilized to conduct this study. **Settings:** The current study was conducted at the neonatal intensive care unit, at Benha university hospital, Benha Specialized Pediatric. **Sample:** A convenient sample of all available nurses (n=) working in previous mention setting& Neonates (n=). **Tools:** Three tools were used, **Tool (I):** A structured interviewing questionnaire sheet including the following parts: **Part (1):** Personal characteristics of the studied nurses. **Part (2):** Personal characteristics of studied neonates **Part (3):** A questioner sheet to assess nurses' knowledge **Tool (II):** An observational checklist to assess nurses' practice **Tool (III):** A questioner to assess nurses' attitude. **Results:** There were a statistically significant differences in improvement nurse's knowledge, practice and attitude regarding care of neonates with hypoglycemia pre / post program implementation. **Conclusion:** The educational program was effective in improving nursing knowledge, practice and attitude regarding care of neonates with hypoglycemia. **Recommendation:** Emphasizing on the importance of continuing in service education for nurses regarding care of neonates with hypoglycemia to keep them up-to date in knowledge, practice and attitude.

# Effect of Preventive Nursing Guidelines about COVID-19 on Hospitalized School Age Children

**Authors:** Eman Ahmed Taha El-Naggar<sup>1</sup>, Faten Shafik Mahmoud<sup>2</sup> and Basma Rabie Abdel-Sadik<sup>3</sup> (1)

## Abstract:

**Background:** Coronavirus disease 2019 (COVID-19) has upended societies and dramatically altered everyday life across the globe. COVID-19 is a highly contagious viral illness caused by severe acute respiratory syndrome. **Aim of the study:** To assess the effect of preventive nursing guidelines about COVID-19 on hospitalized school age children. **Research design:** A quasi-experimental research design was used to carry out the study. **Setting:** The study was conducted in pediatric medical department at Benha University Hospital, which consists of three wards. **Sample:** A purposive sample of hospitalized school age children (7-12) child admitted the above-mentioned setting for treatment during the period of data collection (six months) were included in the study. **Tools of data collection:** Two tools were used. **Tool (I):** A structured interview questionnaire sheet to assess personal characteristics of hospitalized school age children, and their knowledge related to COVID-19. **Tool (II):** Children reported practice related to COVID-19 to assess hospitalized school age children' reported practice related to COVID-19. **Results:** Total knowledge of the studied children about COVID-19 was good and total reported practices related to COVID-19 were satisfactory post preventive nursing guidelines implementation. There were highly statistically significant relations between the studied children's total knowledge score regarding covid-19 and their personal characteristics. There were highly statistically significant relations between the studied children's total practices score regarding covid-19 prevention and their personal characteristics. There was a positive correlation between the studied children's total knowledge and total reported practices between pre and post the preventive nursing guidelines implementation. **Conclusion:** The preventive nursing guidelines was effective in improving hospitalized school age children' knowledge and reported practice about COVID-19. **Recommendations:** Simple Arabic illustrative educational booklets, posters and COVID-19 plan should be produced and provided for all children in inpatient and outpatient department.

# Designed Nursing Guidelines regarding Care of Children Undergoing Bone Marrow Aspiration

**Authors:** Sara Mohamed Wahba Hegazy<sup>1</sup>, Khadiga Mohamed Said<sup>2</sup> and Reda Mohamed Abdullah<sup>3</sup> (1)

## Abstract:

**Background:** Bone Marrow Aspiration (BMA) is an essential invasive technique for diagnosis, examinations or transplantation. BMA should be carried out by trained individuals who are aware of the indications, contraindications and complications of the procedure. **Aim of the study:** This study aimed to evaluate the effect of the designed nursing guidelines on nurses' performance regarding care of children undergoing bone marrow aspiration. **Research design:** Quasi experimental design was utilized. **Sample:** A convenient sample of all available nurses (n=30) working in Hemato-oncology department at Benha Specialized Pediatric Hospital and purposive sample of 10 child undergoing bone marrow aspiration. **Tools:** Two tools were used. **Tool I:** A structured interviewing questionnaire to assess personal characteristics of the studied nurses, characteristics of children, and nurses' knowledge regarding cancer and bone marrow aspiration. **Tool II:** Observational checklist to assess nurses' practice regarding care of children with cancer undergoing bone marrow aspiration. **Results:** There was a highly positive statistical correlation between total knowledge and total practices scores of the studied nurses at pre and post-implementation of designed nursing guidelines. **Conclusion:** The designed nursing guidelines were effective in improving nurses' knowledge and enhancing their practices regarding care of children undergoing bone marrow aspiration. **Recommendations:** Sustainable update of nurses' knowledge and practices regarding care of children undergoing bone marrow aspiration and continuing in-service educational programs should be designed and implemented to motivate nurses in achieving high competent care.

# Improving Nurses' Performance Regarding Care of Neonates with Hyperbilirubinemia Undergoing Blood Exchange: An Educational Program

**Authors:** Dalia Zaghloul El Sayed<sup>١</sup>, Khadiga Mohamed Said<sup>٢</sup> and Reda Mohamed Abdullah<sup>٣</sup>  
(<sup>١</sup>)

## Abstract:

**Background:** Blood exchange is the second- line treatment for sever hyperbilirubinemia. It involves removing aliquots of the neonate blood and replacing with donor blood in order to remove abnormal blood components and circulate toxins whilst maintaining adequate circulating blood volume. **Aim of the study:** Was to improve nurses' performance regarding caring of neonates with hyperbilirubinemia undergoing blood exchange. **Research design:** A quasi-experimental design was utilized. **Settings:** Neonatal Intensive Care Units at Benha University Hospital and Benha Specialized Pediatric Hospital **Sample:** A convenient sample of ٨٠ nurses working in the previously mentioned settings and a purposive sample (٤٣) of neonates with hyperbilirubinemia undergoing blood exchange. **Tools:** **Tool I:** A structured interviewing questionnaire sheet including the following parts; **Part (١):** Personal characteristics of the studied nurses. **Part (٢):** Personal characteristics of neonates. **Part (٣):** Nurses' knowledge assessment sheet. **Tool II:** Observational checklists. **Results:** There was a highly positive statistical correlation between total knowledge and total practices scores of the studied nurses pre and post-implementation of the educational program. **Conclusion:** The educational program was effective in improving nurses' knowledge and enhancing their practices regarding care of neonates with hyperbilirubinemia undergoing blood exchange. **Recommendation:** Periodical follow-up of nurses' knowledge and practices regarding care of neonates with hyperbilirubinemia undergoing blood exchange to detect the points of strength and weakness to act on.

# Effect of Peplau Theory Model Application on Nurses' Performance Regarding Care of Children Post Open Heart Surgery

**Authors:** Ebtsam Abd Elsalam Ahmed \, Hanan Tharwat El Bahnasawy √ and Khadiga Mohamed Said √

## Abstract:

**Background:** Open-heart surgery differs from other types of surgery its need for highly skilled and talented personnel including physician and nurses as well, for this reason it is important for nurses to become familiar with the cardiac surgery. **Aim of the study:** This study aimed to evaluate the effect of Peplau theory model application on nurses' performance regarding care of children post open heart surgery. **Design:** A quasi- experimental design. **Setting:** The present study was carried out in cardiothoracic surgery department and cardiac care unit in the National Heart Institute in Embaba. **Subjects:** A convenience sampling of all available nurses working with children post open heart surgery (ξ·) in previously mentioned setting and purposive sample of children (ξ·) undergoing to post open heart surgery. **Tools of data collection:** Two tools of data collection were used; **Tool I:** A structured interview questionnaire sheet: to assess personal characteristic of nurses, personal characteristics of studied children and medical data, and assess nurses' knowledge post open-heart surgery and peplau theory. **Tool II:** Observation checklist to assess nurses' practice regarding post open heart surgery and discharge planning care. **Results:** There was a positive correlation between total knowledge, total practices and total planning discharge care after application of Peplau theory model regarding post open heart surgery for children. **Conclusion:** Based on the result of the present study The level of nurses' knowledge and practice regarding care of children post open heart surgery was improved after application of Peplau theory model. **Recommendations:** Implementation application of Peplau theory for nurses about care of children post open heart surgery continuously and availability printed booklets and handouts about care of children with light of peplau theory model application to help given health education for children and care givers.

# Effect of Implementing Self-Learning Package about Oxygen Provide to Children on Nurses' Performance at Pediatric Intensive Care Unit

**Authors:** Maha Mohamed Ibrahim\, Rahma Soliman Bahgat\, Basma Rabei Abd El Sadek\ and Seham Mohammed Abd El Aziz

## Abstract:

**Background:** Esophageal atresia is congenital anomalies of the esophagus. The manifestations of esophageal atresia include excessive oral secretions, vomiting and unexplained cyanosis after initial feeding. Complications of esophageal atresia are severe and can lead to poor prognosis and outcomes if left untreated. Nurses provide care for neonates before, during, and after surgical operation to prevent complications. **Aim:** This study aimed to assess nurses' knowledge and practices regarding care of neonates undergoing esophageal atresia surgery. **Research design:** A descriptive study design was used to conduct this study. **Settings:** This study was carried out at Neonatal Surgical Intensive Care Unit at Benha Specialized Pediatric Hospital that affiliated to ministry of health and population. **Subjects:** A convenient sample of all available nurses 60 nurses, A purposive sample of 60 neonate with undergoing esophageal atresia surgery. **Tools of data collection:** Two tools were used: **Tool I:** A structured interviewing questionnaire sheet consisted of 2 parts: **Part 1,** Characteristics of the studied nurses and neonates with esophageal atresia, medical data of studied neonates. **Part 2,** Nurses' knowledge regarding esophageal atresia and care of neonates undergoing esophageal atresia surgery. **Tool II:** An observational checklist: Nurses' practices regarding care of neonates undergoing esophageal atresia surgery. **Results:** More than half of them have poor total knowledge, slightly more than half of the studied nurses have incompetent practice after surgery and there is a highly significant positive relation between total scores of nurses' knowledge and practice regarding care of neonates undergoing esophageal atresia surgery. **Conclusion:** There was a positive statistical correlation between total level of nurses' knowledge and practices regarding care of neonates undergoing esophageal atresia surgery. **Recommendation:** Pediatric nurses should update their knowledge and practice through continuing training, educational programs and workshops concerning the care of neonates undergoing esophageal atresia surgery.

# Nurses' Knowledge and Practices regarding Care of Neonates Undergoing Esophageal Atresia Surgery

**Authors:** Shreen Gamal Abd Elfatah, Basma Rabie Abd Elsadik and Seham Mohamed Abd Elaziz

## Abstract:

**Background:** Esophageal atresia is congenital anomalies of the esophagus. The manifestations of esophageal atresia include excessive oral secretions, vomiting and unexplained cyanosis after initial feeding. Complications of esophageal atresia are severe and can lead to poor prognosis and outcomes if left untreated. Nurses provide care for neonates before, during, and after surgical operation to prevent complications. **Aim:** This study aimed to assess nurses' knowledge and practices regarding care of neonates undergoing esophageal atresia surgery. **Research design:** A descriptive study design was used to conduct this study. **Settings:** This study was carried out at Neonatal Surgical Intensive Care Unit at Benha Specialized Pediatric Hospital that affiliated to ministry of health and population. **Subjects:** A convenient sample of all available nurses 60 nurses, A purposive sample of 60 neonate with undergoing esophageal atresia surgery. **Tools of data collection:** Two tools were used: **Tool I:** A structured interviewing questionnaire sheet consisted of 3 parts: **Part 1,** Characteristics of the studied nurses and neonates with esophageal atresia, medical data of studied neonates. **Part 2,** Nurses' knowledge regarding esophageal atresia and care of neonates undergoing esophageal atresia surgery. **Tool II:** An observational checklist: Nurses' practices regarding care of neonates undergoing esophageal atresia surgery. **Results:** More than half of them have poor total knowledge, slightly more than half of the studied nurses have incompetent practice after surgery and there is a highly significant positive relation between total scores of nurses' knowledge and practice regarding care of neonates undergoing esophageal atresia surgery. **Conclusion:** There was a positive statistical correlation between total level of nurses' knowledge and practices regarding care of neonates undergoing esophageal atresia surgery. **Recommendation:** Pediatric nurses should update their knowledge and practice through continuing training, educational programs and workshops concerning the care of neonates undergoing esophageal atresia surgery.

# The Effect of Training Program on Nurses' Competency Level regarding Care of Children Undergoing Orthopedic Surgery

**Authors:** Esraa Gamal Mohammed <sup>1</sup>, Reda Abd-El Mohsen Mahmoud <sup>2</sup> and Seham Mohammed Abd Elaziz

## Abstract:

**Background:** The quality of care provided to children undergoing orthopedic surgery is directly impacted by nurses' competency; therefore, competency-based training programs could be modified to help with transitions and ensure better outcomes. **The study aim** was to evaluate the effect of training program on nurses' competency level regarding care of children undergoing orthopedic surgery. **Study design** A quasi- experimental with pre and post intervention. **Sample:** A convenient sample of all available nurses (n= 40) and purposive sample of children (n= 40) undergoing orthopedic surgery in Pediatric Surgical Department at Benha Specialized Pediatric Hospital. **Tool (I): A structured interviewing questionnaire sheet:** It included **Part I:** Personal characteristics of studied nurses, **Part II:** Personal characteristics of children, **Part III:** Nurses' knowledge regarding care of children undergoing orthopedic surgery. **Tool (II):** Observational checklist regarding nursing care of children undergoing orthopedic surgery. **Tool (III):** Nurses' Competence Scale. **Tool (IV):** Nurses' attitude regarding competency-based training. **Results:** regarding nurses' care of children undergoing orthopedic surgery at post training program phase the study result showed that, most of the studied nurses had satisfactory knowledge, (87,5%) of them had competent practice and a positive attitude. In addition to, (92,5%) of them had competent level of total competency. **Conclusion:** The majority of the studied nurses had satisfactory knowledge, competent practice, positive attitude, and competent level of competency about care of children undergoing orthopedic surgery at post training program application. **Recommendations:** Implementing competency-based training program in various settings to enhancing the nursing staff's level of expertise in providing care for children undergoing orthopedic surgery.

# Effect of Education Program regarding Antibiotic Stewardship on Nurse's Performance in Pediatric Intensive Care Units

**Authors:** Doaa Awad Mohamed<sup>1</sup>, Faten Shafik Mahmoud<sup>2</sup>, Madiha Hassan Bayoumi<sup>3</sup> and Hanan Nabawy El- aasar<sup>4</sup>

## Abstract:

**Background:** Antibiotic stewardship is the effort to measure and improve antibiotics prescribing by specialists and antibiotic usage by children. **Aim of the study:** This study aimed to assess effect of educational program on pediatric nurse's performance regarding to antibiotic stewardship. **Research design:** A quasi-experimental design was utilized in the study. **Setting:** The study was conducted in Pediatric Intensive Care Units (PICUs) at Benha University Hospital. **Sample:** A convenient sample included all available nurses (n=10) who working in the previously mentioned setting. **Tools of data collection:** **Tool (I)** A Structure Interviewing Questionnaire sheet to assess nurse's characteristic and their knowledge regarding antibiotic stewardship programs. **Tool (II)** An observational questionnaire Format to assess nurse's practice regarding to antibiotic stewardship programs. **Tool (III)** An observational questionnaire Format to assess nurse's attitude regarding antibiotic stewardship programs. **Results:** There was a positive correlation between pediatric nurse's knowledge, practice and attitude scores pre and post implementation of the educational program **Conclusion:** The educational program was effective in improving the level of pediatric Nurse's performance regarding to antibiotic stewardship. **Recommendations:** Enhancing nurse's performance regarding antibiotic stewardship programs through in service training program in PICUs. Further studies; repeating the study on large sample to generalize the results

# Effect of Virtual Reality as a Teaching Strategy on Pediatric Nursing Students' Performance Regarding Cardiopulmonary Resuscitation

**Authors:** Somia Sobhy Elsayed Agm, ʘ Amal Gharib Sabaq and ʘ Reda Mohamed Abdullah

## Abstract:

**Background:** Virtual reality (VR) is an innovative technology and a computer-generated three-dimensional simulation that is associated with high empirical realism. It provides a vast range of sensory information to the user to interact with objects in a virtual environment and can be used to encourage nursing students develop skills in virtual hospital settings. **Aim of the study** was to evaluate the effect of virtual reality as a teaching strategy on pediatric nursing students' performance regarding cardiopulmonary resuscitation. **Study design:** An experimental design (study & control groups/ pre-posttest) was utilized. **Setting:** The pediatric nursing skills laboratory for third year/ Faculty of Nursing/ Benha University. **Study subjects:** A systematic random sample of (ʘ) pediatric nursing students was selected from the pediatric nursing students who were studying the pediatric nursing course/third year/second semester during the academic year ʘʘʘʘ/ʘʘʘʘ. **Tools of data collection:** Three tools were used; **Tool I:** A structured interviewing questionnaire, **Tool II:** Student's clinical evaluation checklist (pre/posttest) and **Tool III:** Virtual reality-teaching material usability questionnaire (posttest). **Results:** Vast majority of nursing students in study group had good knowledge level post-implementation compared with one third in control group. Also, majority of nursing students in the study group had competent total practices level regarding CPR postimplementation compared with more than half in the control group. Furthermore, vast majority of the nursing students in the study group had positive opinion about virtual reality-teaching material usability post-implementation. **Conclusion:** Virtual reality as a teaching strategy was effective in improving knowledge and enhancing practices of pediatric nursing students regarding CPR. **Recommendations:** Integrating virtual reality technology in nursing clinical courses to reinforce their performance in clinical settings.

# **Effect of Applying Virtual Reality Glasses as A supportive Intervention to Reduce Pain, Anxiety and Fear of Children during Burn Dressing**

**Authors:** Yasmine Abd EL Ghany- Abd EL-Fatah<sup>1</sup>, Eman Ahmed Samir<sup>2</sup> and Reda Abd-El Mohsen Mahmoud<sup>3</sup>

## **Abstract:**

**Background:** Burn injuries hurt physically and mentally, this is particularly true for young children who might not accept that procedural pain as dressing changes is a necessary component of recovery. **The study's aim was** to evaluate the effect of applying virtual reality glasses as a supportive intervention to reduce pain, anxiety, and fear of children during burn dressing. **Research design:** A quasi-experimental design was utilized to conduct the study. **Setting:** The study was conducted in Burn Department at Benha Teaching Hospital in Benha City, which affiliated to Egyptian Ministry of Health and Population. **Sample:** A purposive sample consisting of 60 children, they were divided randomly into control and study groups. **Tools of data collection** included four tools, **Tool (I):** A structured Interviewing Questionnaire Sheet that consisted of; **Part (1):** Personal characteristics of children. **Part (2):** Physiological measurements of children such as; pulse, respiration, saturation level and dressing duration time. **Tool II: Pain assessment tool:** it included: **Part (1)** Children behavioral distress observational check list. **Part (2):** Wong- Baker faces (FACES) pain rating scale. **Tool (III):** Children's fear scale. **Tool (IV):** Beck Anxiety Inventory (BAI) scale. **The results:** revealed that there was a highly statistical significance difference between children' total level of pain, fear and anxiety before dressing compared to during dressing change with virtual reality glasses. **Conclusion:** It was concluded that, virtual reality glasses were an effective method in reducing pain, fear, anxiety, and physiological parameters caused by burn dressing in children aged 6-12 years. **Recommendation:** Conducting periodic in-service educational programs for all nurses working in the burn unit to learn about the use of virtual reality glasses to lessen the pain, fear and anxiety associated with burn dressing.

# Mothers' Knowledge and Practices regarding Care of their Children with Xerophthalmia

**Authors:** Hayam Mohamed El-Sayed, ʒ Basma Rabie Abd El-Sadik and ʒ Reda Mohamed Abdullah (1)

## Abstract:

**Background:** Xerophthalmia is a wide range of ocular symptoms due to vitamin A deficiency that can affect school performance and social behaviors of children. **Aim of the study** was to assess mothers' knowledge and reported practices regarding care of their children with xerophthalmia. **Research design:** A descriptive research design was utilized to conduct this study. **Settings:** outpatient clinics of Benha Ophthalmology Hospital and Ophthalmology Clinics of Benha University Hospital. **Sample:** A purposive sample (n=130) of all available mothers regardless of their characteristics with their children suffering from xerophthalmia. **Tools of data collection:** Two tools were used, **tool I:** A structured interviewing questionnaire sheet including characteristics of the studied mothers, characteristics of the children, medical history of children with xerophthalmia and mothers' knowledge assessment sheet and **tool II:** Mothers' reported practices assessment sheet. **Results:** Less than two-thirds of the studied mothers had poor total knowledge score, while less than one-third of them had good total knowledge score. Also, more than two-thirds of the studied mothers had inadequate level of reported practices regarding care of their children with xerophthalmia, while less than one-third of them had adequate level of reported practices regarding care of their children with xerophthalmia. **Conclusion:** There was a positive statistical significant correlation between total knowledge scores and total reported practices scores of the studied mothers regarding care of their children with xerophthalmia. **Recommendations:** Posters and leaflets should be available in children's hospitals and pediatric outpatient clinics regarding xerophthalmia.

## **Effect of Continuous Care Model on Mothers' Knowledge, Satisfaction and the Outcomes of their Children Undergoing Congenital Club-Foot Surgery**

**Authors:** Roquia Afify Abd El Fadel Afify<sup>1</sup>, Faten Shafik Mahmoud<sup>2</sup> and Amal Gharib Sabaq<sup>3</sup>

### **Abstract:**

**Background:** Congenital clubfoot has a significant impact on the physical performance and life of the affected child and leads to reduced quality of life of the child. One of the ways to improve quality of life is to use the continuous care model. **Aim of the study** was to assess the effect of continuous care model on mothers' knowledge, satisfaction and the outcomes of their children undergoing congenital club foot surgery. **Method:** A quasi-experimental design was utilized to conduct this study. **Setting:** The study was conducted in the out patient and inpatient orthopedic pediatric departments at Benha University Hospital and Benha Specialized Pediatric Hospital. **Subject:** A purposive sample of 30 children accompanied their mothers. **Tools:** Three tools were used to collect data: tool I Structured interview questionnaire sheet, tool II Pediatric Mothers' Satisfaction Questionnaire, tools III Children outcomes including Child Health Questionnaire & Post Operative Complications Sheet. **Results:** The vast majority of studied mothers have adequate knowledge & high satisfaction after one month of implementation of continuous care model. Meanwhile, the vast majority of the studied children have good quality of life after one month of implementation of continuous care model and all of them don't have infection and hematoma after three months of implementation of continuous care model. **Conclusion:** The Continuous Care Model had a significant positive effect in improving mothers' knowledge, satisfaction and outcomes of their children undergoing clubfoot surgery. **Recommendations:** The continuous care model should be integrated as a nursing intervention for children undergoing clubfoot surgery.

# Effect of Integrated High-Fidelity Simulation on Self-Efficacy and Satisfaction of Pediatric Nursing Students regarding Newborn Assessment

**Authors:** Fatma Abdellah Mohamed<sup>1</sup>, Faten Shafik Mahmoud<sup>2</sup>, Amal Abdel-Aziz Abdel-Salam<sup>3</sup> and Seham Mohammed Abd-Elaziz<sup>4</sup>

## Abstract:

**Background:** Simulation education is a bridge between classroom learning and real-life clinical experience. It helps in nursing competency before engaging in real situation with the newborns to enhance safety. **Aim:** This study aimed to evaluate the effect of integrated high-fidelity simulation on self-efficacy and satisfaction of pediatric nursing students regarding newborn assessment. **Research design:** A quasi-experimental design was utilized in the current study. **Setting:** This study was conducted at Clinical Pediatric Laboratory Skills for third year students and teaching hall of Faculty of Nursing, Benha University. **Subjects:** A convenient sample of all pediatric nursing students who were studying the pediatric nursing course was enrolled in the study (304 students). **Tools of data collection:** Four tools were used: **Tool (1):** A structured interviewing questionnaire; Part (1): Personal characteristics of the studied students, Part (2): Pediatric nursing students' knowledge regarding newborn assessment. **Tool (3):** Observational checklist for newborn assessment. **Tool (4):** Self-efficacy regarding newborn assessment. **Tool (5):** Students' satisfaction. **Results:** Showed that most of the studied students had unsatisfactory level of knowledge and practice and had low self-efficacy at pre simulation intervention. Compared with, high self-efficacy at immediate post and after four weeks simulation intervention. **Conclusions:** High fidelity simulation intervention regarding newborn assessment had a significant positive effect in improving students' knowledge, practice, self-efficacy and satisfaction towards newborn assessment. **Recommendations:** Integration of high fidelity simulation in pediatric nursing program to enhance students' acquisition of knowledge and performance.

# Improving Nurses' Performance Regarding care of Children with Multiple Trauma Post Road Traffic Accident: An Educational Program

**Authors:** Tahany Rizk Amin Atallah, Amal Gharib Sabaq and Rasha Rady El-Said

## Abstract:

**Background:** Road traffic accident (RTA) can result in various types of injuries, ranging from minor to severe. The severity of these injuries can lead to long-term physical disabilities. **The study aimed to** evaluate the effect of an educational program on nurses' performance regarding care of children with RTA. **Study design:** a quasi-experimental design was utilized. **Setting:** The study was conducted at the Emergency department at Benha hospital. **Study subjects:** (a) a convenient sample of 40 nurses working as full-time at the previous setting and willing to participate in the study, (b) a convenient sample of 40 children with multiple trauma post RTA. **Tools of data collection:** Two tools were used to conduct the study: **Tool (I):** A structured interviewing questionnaire, it included four parts: **Part (I):** Characteristics of the studied nurses, **Part (II):** characteristics of the studied children, **Part (III):** Clinical data of the studied children and **Part (IV):** Nurses' knowledge assessment which is subdivided into two subparts: **Subpart (I):** Nurses' knowledge related to the triage system and **Subpart (II):** Nurses' knowledge regarding care of children with multiple trauma. **Tool (II):** Observational check list. **Results:** Less than half of the studied nurses (47.5%) had a poor total knowledge level pre-educational program. In contrast, more than three quarters (75.0%) had a good level of knowledge post-educational program. Also, less than two thirds (67.5%) of the studied nurses had an incompetent level of practices pre-educational program implementation. In contrast, more than three quarters (75.0%) had a competent level of practices post-educational program implementation. **Conclusion:** There is a highly statistically significant positive correlation between total knowledge scores and total practices scores of the studied nurses' pre and post-educational program implementation. **Recommendations:** Provision of a continuous educational program in order to update nurses' knowledge and enhance their practices related to care of children with multiple trauma post road traffic accident.

# Mothers' Knowledge and Practice regarding Post-Operative Care of Infants with Pyloromyotomy

**Authors:** Marwa El sayed Abd el azeem \, Amal AbdEl-Aziz Abd El-salam\, Hanan El-sayed Metwally\

## Abstract:

**Background:** Infantile hypertrophic pyloric stenosis is one of the most frequently treated surgical conditions in pediatrics and characterized by muscular hypertrophy of the pyloric sphincter, causing obstruction of the gastric out let and projectile vomiting in the new born. **Aim of the study:** Was to assess mothers' knowledge and practices regarding post-operative of infants with pyloromyotomy. **Research design:** A descriptive study was used to conduct the present study. **Setting:** This study was conducted in Intermediated surgical ICU Department of Benha Specialized Pediatric Hospital at Benha city. **Sample:** A purposive sample of mothers who accompanied their infants diagnosed with pyloric stenosis and attended the previously mentioned setting for six months. **Tools of data collection:** Two tools were used to collect the required data. **Tool I:** A structured interviewingquestionnaire sheet, consisted of two parts: Part one; Personal characteristics of study subject. Part two; Mothers knowledge assessment sheet. **Tool II:** Mothers' reported practices checklists to assess mother practice to ward post operative care of infant with pyloromyotomy. **Results:** The majority (80,0%) of studied mothers had poor knowledge about pyloric stenosis and pyloromyotomy operation. More than three- quarters (76,9%) of studied mothers had unsatisfactory level reported practices regarding postoperative care of infants with pyloromyotomy. **Conclusion:** There was highly significant correlation between mothers knowledge and their practice. **Recommendations:** Designing and implementing educational programs for mothers of infants with pyloric stenosis to support them emotionally and to minimize their stress regarding pyloromyotomy.

# Effect of Breathing Meditation Technique on Reducing Pain and Anxiety Among Children Undergoing Chemotherapy

**Authors:** Hala Kotb Hassan El- Nemrawy<sup>1</sup>, Amal Abd- El Aziz Abd El- Salam<sup>2</sup> and Rasha Rady El-Said<sup>3</sup>

## Abstract:

**Background:** Chemotherapy is the use of medicines to treat cancer or kill cancer cells. But it can result in side effects as pain and anxiety. Breathing meditation technique is used as an effective nonpharmacological treatment to reduce pain and anxiety among children undergoing chemotherapy. **Aim:** This study was aimed to evaluate the effect of breathing meditation technique on reducing pain and anxiety among children undergoing chemotherapy. **Research design:** A quasi-experimental design was utilized to conduct this study. **Setting:** This study was carried out at the Pediatric Oncology Unit in Specialized Pediatric Hospital affiliated to Specialized Medical Centers Secretariat in Benha city. **Subject:** A purposive sample of (70) children undergoing chemotherapy during six months period. **Tools of data collection:** Data was collected through the following tools: **Tool I:** A structured Interviewing Questionnaire. **Tool II:** Observational checklist for implementation breathing meditation technique. **Tool III:** Wong –Baker Faces Pain Rating Scale. **Tool IV:** Beck Anxiety Inventory Scale. **Results:** There was a highly statistical correlation between total practices, pain and anxiety level among studied children pre and post implementation of breathing meditation technique. **Conclusion:** All children who practiced breathing meditation technique experienced a significantly decrease in total pain and anxiety level. **Recommendations:** The breathing meditation technique can be used as a routine nursing intervention for all children with cancer undergoing chemotherapy.

