

need for the latest available evidence to improve our nursing protocols and (b) the availability of suitable graduation subjects in this instrument.

**PO-0893** **WHAT DO THE MOTHERS' PREFER FOR MATERIALS ABOUT CHILDREN'S CARE?: CLOTHING, HYGENIC CARE AND NUTRITION**

<sup>1</sup>M Uzun, <sup>2</sup>NY Atar, <sup>3</sup>M Kar, <sup>3</sup>F Yilmaz, <sup>3</sup>C Karasakal. <sup>1</sup>Child Health and Illnesses Nursing, Bulent Ecevit University, Zonguldak, Turkey; <sup>2</sup>Essentials of Nursing, Bulent Ecevit University, Zonguldak, Turkey; <sup>3</sup>Nursing Department, Bulent Ecevit University, Zonguldak, Turkey

10.1136/archdischild-2014-307384.1515

**Background and aims** Immature organ systems of children are often less capable of fending off chemical assaults. Subtle damage to developing bodies may lead to disease later in life. Mothers need to have a careful consideration. As fragile living being children need to be carefully protected and need proper clothing, hygienic care and healthy nutrition. The aim of this study was determining preference of mothers' about cloths, hygienic materials (especially toiletries) and nutrition for their children.

**Methods** A descriptive quantitative approach was used in study. The data were obtained from 198 mothers who has child in different ages by a questionnaire designed by researchers. Data was evaluated using the descriptive statistics available in the Statistical Package for Social Sciences Software (SPSS 16.0).

**Results** Most of the mothers were (43,4%) between 26–30, high-school graduate (% 34,3) and housewife (66,2%), the salary of (45,5%) 1001–1500 TL. The mother's selection criteria for their children's clothes, hygienic materials, shoes and food are; for clothes according to texture (cotton) (50,8%), for hygienic material according to be hypoallergic (50,3%), for shoes according to flexibility (39,1%), for food according to experience (66%).

**Conclusion** It is shown that the mothers' preference were focus on the best things they can effort. The age, economical status and job didn't influence their decision directly.

**PO-0894** **MY HANDS CLEAN, I AM HEALTHY**

<sup>1</sup>M Uzun, <sup>2</sup>A Gundogdu, <sup>3</sup>F Yilmaz, <sup>3</sup>M Kar, <sup>3</sup>C Karasakal. <sup>1</sup>Child Health and Illnesses Nursing, Bulent Ecevit University, Zonguldak, Turkey; <sup>2</sup>Nursing, Ereğli Educational and Research Hospital, Zonguldak, Turkey; <sup>3</sup>Nursing, Bulent Ecevit University Zonguldak School of Health, Zonguldak, Turkey

10.1136/archdischild-2014-307384.1516

**Background and aims** Hygen education is one of the most important self-care activity in pre-school children. We can protect the chilrens from mycrobic diseases by teaching the principles of hand hygiene, toilet hygiene and bathing. The purpose of the study is teaching true techniques of hand washing, rules of toilet and bathing hygiene to pre-school children.

**Methods** This study performed with 150 pre-school children between the age of 3–6 during the Child Health and Illnesses Nursing Course. Four nursing students prepared a powerpoint presentation about microbes, preventions, hand, bathing, toilet hygiene by the help of their lecturer. They presented powerpoint presentation to the pre-school students, next showed videos about hand, toilet and bath hygiene, learnt true hand washing technique by demonstration.

**Results** Although benefits of hygiene and harm of microbes learning ability of children changed according to the age most of the students achieved the goals of the studies. 90% of 4 years of students washed their hands in true technique, 80% of 5 years old students obeyed hygiene rules for toilet and bathing and 73% of 6 years old students count the benefits of hygiene and harm of microbes.

**Conclusion** The learning activities of children can be supported by explanation, demoststration and application. Nursing students can perform great role on teaching the subjects regarding protection and promoting of health. If the student see the true role model behind them, they can learn true activity easily.

**PO-0894a** **THE EFFICACY OF MECHANICAL VIBRATION OF HEEL STICK PAIN IN TERM NEONATES**

<sup>1</sup>FN Dolu, <sup>2</sup>A Karakoc, <sup>1</sup>I Mungan Akin. <sup>1</sup>Department of Pediatrics, Istanbul Medeniyet University Goztepe Education and Research Hospital, Istanbul, Turkey; <sup>2</sup>Department of Pediatric Nursery, Marmara University Institute of Health Sciences, Istanbul, Turkey

10.1136/archdischild-2014-307384.1517

**Background and aims** During 80's most paediatricians believed that newborns do not feel pain because of immature peripheral nervous system and incomplete myelinization; which turned out to be false. Today, either non-pharmacologic or pharmacological analgesia during invasive procedures is mandatory. On the other hand vibration is very well known for pain relief since 40's. In this study we aimed to evaluate the effectiveness of mechanical vibration application to avoid pain sensation during heel puncture in newborn babies.

**Methods** This study is a prospective single centre, randomised clinical trial. Sixty healthy term neonates were divided into 2 for Control (sucrose) and Study groups (sucrose+vibration). Heel puncture was applied to these babies for the 1st time during routine testing for metabolic disease screening. Data of the participants were recorded and NIPS was used to evaluate the behavioural response of neonates during pain.

**Results** Cronbach's alpha coefficient for NIPS scoring system was found as 0.85 during procedure and as 0.87 after procedure. Reliability of the study was found to be high. Mean of NIPS scores in study and control groups were significantly higher during procedure and after procedure ( $p < 0.001$ ).

**Conclusions** Mechanical vibration is found to be effective in decreasing pain sensation in neonates and can be applied as one of non-pharmacologic methods.

## Nursing-Neonatal Others

**PO-0895** **RURAL RESEARCH REVIVED**

<sup>1</sup>BJ Bromage, <sup>2</sup>L Trembath, <sup>1</sup>PF Munyard, <sup>1</sup>AC Collinson. <sup>1</sup>Neonatal Unit, Royal Cornwall Hospital, Truro, UK; <sup>2</sup>Research Development and Innovation, Royal Cornwall Hospital, Truro, UK

10.1136/archdischild-2014-307384.1518

**Background and aims** Our remote Local Neonatal Unit (LNNU) is located in Cornwall, and is 180 miles from the nearest tertiary centre. We already had research experience, but the lack of dedicated nurse support was inhibiting further research participation. Our aim was to promote neonatal research to facilitate inclusion in more studies.

**Method** A neonatal research nurse was recruited in 2012. Measures were implemented to increase the number and complexity of studies, and to be proactive in effective screening mechanisms, resulting in early identification of patients. Research was actively promoted, and teaching provided on a rolling programme. A close link was established with the Paediatric Research Nursing Team, to provide administrative support and cover in times of absence.

Links were made with research colleagues both regionally and nationally, and attendance at study days and conferences were identified as effective networking strategies.

Parental participation in research was encouraged, with the research nurse providing a link for the parents.

**Results** The number of studies has increased from an average of 1 ongoing study to 7 current studies. These studies include a meningitis study, a vaccine study, a platelet transfusion study and a large cohort observational study. A Patient Participation Involvement study is planned for the near future, and a service evaluation of the research team is awaiting approval.

**Conclusions** Effective neonatal research is dependent on a motivated and adequately resourced research team, including dedicated nursing research time. This has ensured that our LNNU will continue to provide excellent neonatal care, underpinned by research.

**PO-0896 CONSEQUENCES OF SECOND – AND THIRDHAND SMOKE EXPOSURE FOR NEWBORNS AT THE NEONATAL INTENSIVE CARE UNIT**

KE de Jonge, MJ Hemmink, JM Wielenga. *Intensive Care Neonatology, Emma Children's Hospital/Academic Medical Center, Amsterdam, Netherlands*

10.1136/archdischild-2014-307384.1519

**Background and aims** Smoking is consuming the smoke of smouldering tobacco. Inhaling harmful substances from tobacco and a higher risk for disorders, is general knowledge. Less well known are the possible effects of second- and thirdhand smoke. Secondhand smoking is the involuntary inhalation of tobacco smoke in the ambient air. Inhaling the smoke residues from walls, furniture, clothes, toys and other objects or absorbing it through the skin is referred to as thirdhand smoking. The aim is to provide a scientifically based advice on dealing with this issue in a hospital setting.

**Methods** A literature-study is performed. A PICO (patient-intervention-comparison-outcome) question is formulated to guide a literature search in scientific databases. Articles will be critically appraised.

**Results** Four studies (two reviews, one cohort, one descriptive) were found all pointing out that exposure to second- and thirdhand smoking may adversely affect young children, especially in the age up to 1 year including preterm or otherwise respiratory compromised newborn infants in the NICU. Also addressed is the lack of knowledge of parents and staff on the consequences of second-and thirdhand smoke. Hospital staff has an opportunity to educate parents about the effects of smoking on their newborn baby. Additional steps as changing clothes and wearing gloves after smoking would be appropriate.

**Conclusions** Healthcare professionals should take their responsibilities in preventing harm to fragile newborn infants as a result of tobacco smoke more serious.

**PO-0897 SUDDEN INFANT DEATH SYNDROME IN LOW BIRTH WEIGHT INFANTS**

V Ciriik, EEEE. *Nursing Faculty, Akdeniz University, Antalya, Turkey*

10.1136/archdischild-2014-307384.1520

**Background** Sudden infant death syndrome (SIDS) occurs less frequently in the first month of life, peaks between 2 and 4 months of age, and decreases thereafter. Prone sleeping (placing an infant to sleep on his/her stomach), bed sharing, parents not sleeping in the same room as the infant, an infant not using a pacifier during sleep, overheating, and maternal smoking during pregnancy have been suggested as contributing factors for SIDS.

**Aim** To examine SIDS in low birth weight infants.

**Methods** Compilation.

**Results** Infants who are born prematurely or who have low birthweight have up to four times the risk of SIDS than those infants born at term, and this risk increases with decreasing gestational age or birthweight. Low birth weight infants have a significantly higher risk of SIDS, a risk tightly correlated with prematurity. High SIDS incidence among low birth weight, very low birth weight, and extremely low birth weight infants persists despite increased overall survival within these infant populations. As a result, an increase in SIDS deaths could be expected in the lower birth weight infants because of the decreased competing mortality pressures during the neonatal period. In low birth weight and normal birth weight infants, we would anticipate a less marked increase in survival and, because of their increased maturity, a less apparent effect on SIDS rates.

**Conclusion** Parents of low birth weight infants require appropriate SIDS prevention education, including information about the dangers of environmental tobacco exposure and prone infant sleep.

**PO-0898 UMBILICAL CATHETER AND BLOOD SAMPLING IN VERY LOW BIRTH WEIGHT INFANTS FOR THE FIRST 72 HOUR OF LIFE PROTOCOL**

P Gil Castro, A Merino Landry, P Romero Pacheco, J Silla Gil. *Neonatology, Hospital Sant Joan de Déu, Barcelona, Spain*

10.1136/archdischild-2014-307384.1521

**Background and aims** Very low birth weight (VLBW) infants are extremely vulnerable and usually require central catheters and frequent blood tests. Our aim was to develop a protocol regarding umbilical catheter fixation and blood samples for VLBW during the first 72 h of life.

**Methods** A retrospective study was carried out by a multidisciplinary team describing the intervention variables in 10 VLBW admitted to our Unit. In parallel a bibliographic research was performed on the International data bases, answering our PICO questions. The population of the study was VLBW under 32 weeks of life and/or under 1.500 grams of weight. Interventions were catheter fixation, number, volume and speed of extraction and reinfusion during first 72 h.

**Results** Our population had a mean gestational age and birth weight of 30 weeks and 1200 grams. Our data showed a mean of 11 tests per patient during first 72 h of life, none using umbilical cord blood. Registration of velocity was not reported. After a literature review we designed a protocol of catheter fixation and blood samples for VLBW during first 72 h. The protocol included using cord blood for the first sampling and a description of adequate sample size and velocities.