

according WHO classification of puberty age: 1gr. - before puberty- 1–9 y.o., 2 gr. – puberty- 10–18, 3 gr. – after puberty – older 18. Frequency of epilepsy onset was studied in 4 subgroups of puberty period according phases of maturing of hypothalamo-hypophysial system: 10–11 y.- beginning of hypothalamo-hypophysial hormones secretion, 12–13- beginning menses, 14–15- becoming of ovulatory peak, 17–18- establishment of a constant rhythm of hormones secretion. Ages of epilepsy onset and menarche were compared. STATISTICA for Windows system (version 5.5) was used.

**Results** There were 23 patients (15%) in 1 gr., 92 (59%) – 2 gr, 40 (26%) – 3 gr. Differences in the comparison groups were statistically significant above in puberty ( $p < 0,001$ ). Epilepsy began in childhood in 75%. Epilepsy onset in 4 subgroups of puberty period: subgroup 1–18 patients (in  $\frac{1}{4}$  cases), subgroup 2–35 (almost in  $\frac{2}{5}$  cases), subgroup 3–24 (in  $\frac{1}{4}$  cases), subgroup of 4–15 (less than in  $\frac{1}{5}$  part). Prevalence of epilepsy onset in the integrated age range of 12–16 years was statistically reliable ( $p < 0,001$ ). Both epilepsy onset and menarche occurred in 13% (less than in  $\frac{1}{6}$  part).

**Conclusion** Thus, hormonal changes in puberty often provoked epilepsy onset. It confirms proconvulsive effect of estrogens. Information is very important for patients with burdened neurologic anamnesis.

## Nursing – Endocrinology/Diabetes/ Metabolism

### PO-0864 THE DIFFICULTIES EXPERIENCED BY CHILDREN WITH DIABETES: A QUALITATIVE STUDY

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**Background and aim** Being a chronic disease, diabetes affects children's life styles, causes changes in their routines and makes them cope with many difficulties of the diabetes treatment. The purpose of this study was to determine the difficulties experienced by children with diabetes.

**Methods** The study used the method of focus group interviews and face-to-face in-depth interviews for qualitative studies. Interviews were held with the 7 children aged 12–18 with type 1 diabetes mellitus on January 2014. Data was collected using a semi-structured questionnaire prepared by the investigators through screening. The children's and their mothers' verbal consents were obtained.

**Results** Concerning the diabetes treatment, all the children stated that they did not like having their fingers pricked every day, found it difficult to get used to needles and they would be happier without needles. Regarding the question, "Are you having a difficulty with controlling your diet", 2 children answered, "I occasionally want to eat sweets but I can't because of my disease" and 2 answered, "While my friends eat anything they want, I can't. I like pasta a lot and I want to eat. But I know I am not allowed to". Regarding the question, "Do you restrict your physical activities due to diabetes?", almost all of them stated that they had a difficulty in physical education lessons and restricted their activities at school.

**Conclusion** In the study, we think that healthcare professionals should provide the convenient support and consultancy services

by taking especially the diabetes treatment of children and their anxieties about living with this disease into consideration.

### PO-0865 THE AGGRESSION AND SELF- INJURY BEHAVIOURS IN ADOLESCENTS WITH TYPE 1 DIABETES MELLITUS

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**Background and aims** Adolescents tend to have risky behaviours like aggression and self-injury due to the age period characteristics. The risk of aggression and self-injury may increase in adolescents with the addition of chronic diseases. This study was conducted descriptively to determine and compare the aggression and self-injury in those with type 1 diabetes mellitus (T1DM) and healthy adolescents.

**Methods** The study sample consisted of 60 adolescents with T1DM followed up in the child endocrinology polyclinic of a university hospital and 319 healthy adolescents, 15–18 aged, at 9th–12th grade at high school. In the study, the permission of the institution, Ethical Committee, the parent and adolescent consent, the data were collected using a questionnaire form, Aggression Questionnaire (AQ) and Inventory of Statements About Self-injury (ISAS). The descriptive statistics, Shapiro-Wilk, Mann-Whitney U, student t, Ki-kare, Spearman correlation tests were used for analysing data.

**Results** The mean scores of AQ all subscales and the total scale of healthy adolescents were higher than adolescents with T1DM ( $p < 0.05$ ). Mean ISAS scores of adolescents with T1DM were higher than the healthy adolescents ( $p > 0.05$ ). The mean scores of autonomic function, social function and ISAS were positively moderately correlated with the mean scores of total aggression in both healthy and diabetic adolescents ( $p < 0.05$ ).

**Conclusions** Considering the age period characteristics, giving weight to sport (especially team sports), social and cultural activities and education about anger-stress management and effective communication skill to adolescents and their families in school may be recommended.

## Nursing – Intensive Care and Paediatric Emergency Care Medicine

### PO-0866 ASSESSING THE VALIDITY AND RELIABILITY OF THE COMFORT-BEHAVIOUR SCALE IN CHILDREN THREE YEARS OF AGE AND OVER

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**Background** Self report is considered to be the "gold standard" of pain assessment but is frequently unobtainable in the ICU. The psychometric properties of the COMFORT-Behaviour (COMFORT-B) scale have been evaluated in children under the age of 3 years.

**Aim and objectives** To establish the reliability and validity of the COMFORT-B scale in children > 3 years of age in a PICU setting.

**Methods** A prospective observational study was performed using a repeated measures design in children from 3–17 years in two intensive care and high-dependency units in Ireland. Interrater reliability was tested among nurses using linearly weighted kappa, Cronbach  $\alpha$  was applied to test internal consistency of the COMFORT-B scale and concurrent validity involved comparing COMFORT-B with the FLACC and Numeric Rating Scale score of nurses.

69 paired nursing assessments to test the interrater-reliability of the COMFORT-B scale was performed. With a high interrater-reliability of Cronbach 0.87, Single nurse observations were commenced of the COMFORT-B, NRS and FLACC/Self-report scores at specific four-hourly intervals over the first 48 h of each admission.

**Results** Data in 19 patients (age 3 to 17 years) was collected for the pilot study. Initial compliance of 4% increased to over 80%. Interrater reliability between COMFORT, FLACC and NRS remained high throughout the study.

**Conclusion** The COMFORT-B is suitable for use in children and adolescents from 3–17years.

PO-0867 WITHDRAWN

## Nursing – Neonatal Brain and Development

PO-0868 NEUROMONITORING; HOW TO TRAIN YOUR NURSING STAFF

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**Background and aims** Neuromonitoring, using amplitude-integrated Electroencephalography (aEEG) and near infra-red spectroscopy (NIRS), is common practice on our Neonatal Intensive Care Unit (NICU). The quality of the registration depends on the application of the aEEG-needles or hydrogel electrodes and the NIRS-pad, handling the equipment and interpretation of the registration.

Incorrect placement of the electrodes (too close to each other) by untrained nursing staff can lead to a registration full of artefacts, which may be interpreted as epileptic events or epileptic events may be missed. The correct interpretation of the aEEG patterns has a complex learning curve.

**Method** An e-learning course about monitoring the neonatal brain was developed to ensure that nurses are able to learn at any time, at any place on any computer. The hospital provided an e-learning-team. The e-learning course is located at a virtual learning environment which every member of the hospital staff has access to.

**Results** We developed an e-learning course which provides an interactive teaching tool to learn all about the near infra-red spectroscopy (NIRS) and four different aEEG monitor devices. Quizzes are included to practice how to interpret the aEEG recordings, which is essential in evaluating the monitoring of the neonatal brain.

**Conclusion** E-learning is an interactive learning tool which will enable the staff to keep their skills up to date in using different NIRS- and aEEG monitors and will allow correct interpretation of the aEEG recordings.

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## Nursing – Neonatal Pulmonology

PO-0869 DEVELOPMENT AND IMPLEMENTATION OF EVIDENCE BASED CLINICAL GUIDELINE REGARDING ENDOTRACHEAL SUCTIONING OF THE INTUBATED NEONATE

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There is sparse evidence regarding endotracheal suctioning procedures in neonatal intensive care. We undertook a systematic literature review on following topics:

1. Suctioning frequencies
2. Pre-oxygenation
3. Installation of normal saline
4. Catheter size
5. Suctioning depth
6. Suctioning strength
7. In-line suctioning versus open suctioning
8. Recruitment manoeuvres

Results showed some evidence that suctioning could safely be performed as rarely as every eight hours plus as needed, that catheter size should not be larger than 70% of internal diameter of endotracheal tube size, that catheter only should be inserted as far as the tip of the tube, and that closed in-line suctioning systems could be used, and might be beneficial in neonates.

There is sparse evidence regarding pre-oxygenation, installation of saline, strength of vacuum and recruitment manoeuvres to give evidence based recommendation.

The Neonatal unit in University Hospital of Copenhagen then changed suctioning guidelines accordingly to the recommendations found in the literature review.

We planned an implementation strategy inspired by Berwick and Bataldan's 'The Breakthrough Series', and Rogers 'Diffusion of Innovations', starting with baseline monitoring of chosen indicators such as incidence of occlusion of tubes, re-intubations, days on ventilator, length of stay, incidence of VAP, morbidity and mortality.

The implementation process was and is monitored by visual charts, graphs and numbers of the chosen indicators, and is a interdisciplinary focus in the unit.

## Nursing – Primary Care and General Paediatrics

PO-0870 THE SEXUAL DEVELOPMENT AND EDUCATION OF PRESCHOOL CHILDREN: KNOWLEDGE AND OPINIONS FROM DOCTORS AND NURSES

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**Background and aims** Especially the period between the ages of 0–6, which is known as the early childhood period (preschool period), is a very critical period where learning is fastest, the child is affected the most from environmental factors, and the