

## P298 THYROID CANCER PATIENT'S FERTILITY AFTER RADIOACTIVE IODINE THERAPY

Kristina Vabalayte\*, Anatoly Romanchishen. *St. Petersburg State Pediatric Medical University, St. Petersburg, Russian Federation*

10.1136/archdischild-2019-epa.648

**Background** For patients with differentiated thyroid carcinoma (DTC), the effect of radioactive iodine (RAI) therapy on gonadal and reproductive function is an important consideration.

**Objective and methods** 127 children were operated on thyroid in case of DTC during 1975–2015. 87 pts were treated by RAI (1–13 times). Average age is 15 years (4–18). Histological types of DTC were papillary (69%), follicular (27%), other (4%). Average follow up period is 3 year (2–40). We analyzed effect of therapeutic RAI on sex steroid level; on ovarian function, menses, ovulation in women; sperm in men; future fertility; pregnancy outcomes.

**Results** Early side effects (during 1<sup>st</sup> week after RAI) included nausea and vomiting (29%), sialoadenitis (22%), temporal bone marrow dysfunction (6%). Late side effects included permanent salivary glands' dysfunction (2%), permanent bone marrow dysfunction (4%), lung fibrosis (5%), second tumors – leucosis, breast cancer (4%), fertility disorder (7%). Fertility was analyzed in 78 pts. Sterility (2%), amenorrhea (4%), changes in menstrual period (5%), miscarriage (4%).

**Conclusion** RAI should be prescribed only for indications. Sexual cell should be cryopreserve before RAI.

## P299 REVIVAL OF A NEWBORN SCREENING PROGRAM IN THE PEOPLE'S DEMOCRATIC REPUBLIC OF LAOS

<sup>1</sup>Thomas Hoehn\*, <sup>2</sup>Bounnack Saysanongkham. *<sup>1</sup>University Hospital Duesseldorf, Duesseldorf, Germany; <sup>2</sup>Ministry of Health, Vientiane, Lao, People's Democratic Republic*

10.1136/archdischild-2019-epa.649

**Background** Neonatal screening programs have been established and are in use in most countries worldwide. Laos belongs to the few countries which still have not established any kind of newborn screening.

**Description** Participants of an initial pilot project between 2008 and 2010 were the large maternity hospitals within the city of Vientiane (Mahosot Hospital [2.500 deliveries], Sethathirath Hospital [2.000 deliveries], Friendship Hospital [700 deliveries], and Mother & Child Health Hospital [3.500 deliveries]). Samples were taken immediately prior to hospital discharge and once weekly air-shipped to a German screening laboratory.

**Lesson learned** Altogether 11.362 samples of newborn infants have been examined. The rate of retests was above European average due to very early discharge policies in Laotian maternity hospitals. Confirmed cases of neonatal congenital diseases included two infants with hypothyroidism and one infant with congenital adrenal hyperplasia without salt-loss. All three infant received early therapy and are currently doing well.

**Next steps** To re-establish newborn screening in a sustained manner following the demonstration of feasibility during the pilot project. Newborn screening for TSH will be initiated in early 2019 in all delivery hospitals in the urban area of Vientiane, capital of Laos. As opposed to the pilot project, measurements in the lab will take place within the country at the laboratory of the largest delivery hospital in Vientiane, the Mother & Newborn Hospital.

## P300 INVESTIGATION OF THE ASSOCIATION BETWEEN INFANTILE SKIN CONDITIONS AND THE MAIN DIETARY FACTORS: A NATIONAL COHORT STUDY

<sup>1</sup>Shauna Quinn\*, <sup>2</sup>Lina Zgaga, <sup>2</sup>Cristina Taut. *<sup>1</sup>Paediatrics, Trinity College Dublin, Dublin, Ireland; <sup>2</sup>Public Health and Primary Care, Trinity College Dublin, Dublin, Ireland*

10.1136/archdischild-2019-epa.650

**Aims** Skin conditions are common amongst infants. A topic of particular interest is whether or not eczema is associated with the main dietary factors of the infant within the first nine months. The dietary factors investigated are breastfeeding duration, artificial formula feeding, timing of introduction of formula and solids. Data was acquired from the Growing Up in Ireland: National Longitudinal Study, following the progression of two cohorts of children aged 9 years and 9 months. The aim of this study is to investigate the association between skin conditions and the main dietary factors in a sample of 9-month old infants.

**Methods** The study population (9,326 infants) examined was Wave 1 of the infant cohort of Growing Up in Ireland. Large numbers of covariates were investigated, as a result of existing literature. Chi-square tests were performed for analyses of the association between diagnosed skin conditions and the categorical variables chosen. T-tests of differences in the mean and 95% CI's estimation were employed for all continuous variables. During the analysis, skin conditions were characterised as a binary variable. All variables were considered in the multi-variable logistic regression model, excluding insignificant variables from the final model.

**Results** Introduction of artificial formula was found to have a positive association with diagnosed skin conditions in the infant (OR=0.999, 95%CI: 0.997–1, p-value=0.02226). Earlier introduction led to a higher risk of skin conditions. Breastfeeding duration and introduction of solids were not associated with neonatal skin conditions. Maternal stress (OR= 1.01, 95%CI: 1.00–1.02, P-values= 0.05) and smoking in the household during pregnancy (OR=0.90, 95%CI: 0.82–0.98, P-value= .02) have suggestive associations with skin conditions.

**Conclusion** Early introduction of artificial formula has a positive association with skin conditions in infants, while breastfeeding duration and introduction of solids may have no correlation. This study highlights the importance of the WHO recommendation of exclusive breastfeeding for 6 months.

## P302 ALCOHOL CONSUMPTION & BREASTFEEDING: A REVIEW OF THE EVIDENCE

Paul Mullane\*, Mary T O'Mahony. *Department of Public Health HSE South, Cork, Ireland*

10.1136/archdischild-2019-epa.651

**Background/Aims** The benefits of breastfeeding for the mother-infant dyad are recognised. Every effort should be made to encourage and facilitate women to breastfeed successfully. The use of alcohol in the context of breastfeeding is the subject of debate. Guidance can be conflicting and a potential source of confusion. The HSE Alcohol Programme requested public health expertise to undertake a review of the evidence to provide clarity for women. Low-risk alcohol consumption was the context (<11 standard drinks per week; standard drink = 10 g alcohol - half-pint beer, 100 ml 12.5% wine).

## Abstracts

Key literature was assessed around a number of themes:

- Alcohol concentration in breast milk and time to elimination
- Level of potential alcohol exposure in the breastfeeding infant
- Effects on infant feeding, sleep and neurodevelopment

**Methods** A research request was made through the HSE Library Service to source relevant literature. Keywords in the search strategy included 'breastfeeding', 'breast milk', 'alcohol', 'ethanol', 'infant', 'paediatric'. Multiple databases were searched: Scopus, Pubmed, Embase, Web of Science, Cochrane, Cinahl, PsycINFO, Science Direct, and Clinical Key.

Titles and abstracts were assessed against pre-specified inclusion criteria. Full-text articles for studies meeting the inclusion criteria were retrieved for in-depth review. CASP checklists were used to assess study quality.

**Results** 3 systematic reviews and 27 observational studies were identified.

Alcohol level peaks in breast milk about 30–60 minutes post-ingestion.

2 hours required, on average, to metabolise 1 standard drink. Breast milk will contain alcohol until this time has elapsed.

If an infant were fed at peak alcohol concentration it will receive only about 3% of the maternal 'dose'.

No significant effect on the amount the infant drinks at the breast. It may result in more interrupted infant sleep. No effect on neurodevelopment.

**Key messages** Avoid alcohol in the first month postpartum as feeding is very frequent and it takes time to establish a routine.

For women breastfeeding beyond 1 month:

- Continue to adhere to guidance on low-risk alcohol consumption.

- Feed your baby before having a drink.

- Express milk before drinking alcohol. This will allow you to feed your baby if they need feeding before you are ready.

**Conclusion** This review provides an important update to HSE advice on alcohol use and breastfeeding. Our findings have since been incorporated into new user-friendly guidance, available at [askaboutalcohol.ie](http://askaboutalcohol.ie), [breastfeeding.ie](http://breastfeeding.ie) and the recently launched [mychild.ie](http://mychild.ie). The information presented is consistent throughout to ensure robust, clear and transparent advice.

P303

**A MULTICENTRE HEALTH PROMOTION STUDY, EXAMINING PARENTAL KNOWLEDGE OF AND REDUCING EXPOSURE TO PASSIVE SMOKING (REPS)**

<sup>1</sup>Sheena Coyne\*, <sup>2,3</sup>Michaela Pentony, <sup>1</sup>Juliette Lucey, <sup>1</sup>Navdeep Kaur Brar, <sup>1</sup>Bazlin Ramly. <sup>1</sup>University Hospital Waterford, Waterford, Ireland; <sup>2</sup>Our Lady of Lourdes Hospital Drogheda, Louth, Ireland; <sup>3</sup>Temple Street Children's University Hospital, Dublin, Ireland

10.1136/archdischild-2019-epa.652

The harmful effects of environmental tobacco smoke on the paediatric population is well documented in the literature. The aim of this study is to examine the existing parental knowledge between passive smoking and increased rates of paediatric hospitalisation and to provide an intervention in the form of referral to a smoking cessation programme.

A pilot study was conducted in a tertiary paediatric centre. This prospective cohort study recruited thirty-six paediatric

patients presenting with respiratory tract infections. Consenting families were asked seven questions regarding their smoking habits. Following completion of the pilot study a further fifty patients from two level two paediatric centres were identified. In the level two centres focus was narrowed to children directly affected by passive smoking. Parents accepting referral to a twelve-week smoking cessation programme are currently being followed up over a six-month period. In the case of parents declining a referral to smoking cessation, a reason for refusal was also sought.

From the pilot, although most claimed a desire to quit smoking, acceptance of referral to the smoking cessation programme was poor. Results from the level two centres where the service is offered on site reflected better uptake with 52% (26/50) accepting a referral to smoking cessation services. Over the three centres only 69% of parents claimed an awareness of the harmful effects of environment tobacco smoke with a wide variation between different geographical areas. Results comparing the three centres are demonstrated in the table below.

**Abstract P303 Table 1**

	Site A Tertiary Centre	Site B Level two centre	Site C Level two centre
No. of patients	36	25	25
Smokers	14	25	25
Desire to quit	71% (10/14)	80% (20/25)	92% (23/25)
Referred	28% (4/14)	64% (16/25)	40% (10/25)
Awareness	86% (31/36)	44% (11/25)	68% (17/25)

Preliminary results from smoking cessation team showed that 50% (13/26) of those referred from the level two centres attended their cessation appointments. 11% (3/26) changed their minds once contacted by the smoking cessation team and the remainder were uncontactable or have not yet made an appointment. 23% (6/26) were smoke free for the last fourteen days at the time of follow up.

Our data suggests scope to improve education of parents on the harmful effects of environmental tobacco smoke. We also suggest that referral to smoking cessation services routinely be offered to parents of children exposed to environmental tobacco smoke as a cost-effective health promotion strategy. Recruitment is ongoing.

P304

**THE CASE OF PERTUSSIS IN NEWBORNS AND INFANTS: THE EPIDEMIOLOGY THAT 'COUNTS' IN VACCINATION CHOICES**

<sup>1</sup>Federico Marchetti, <sup>2</sup>Claudia Guiducci, <sup>1</sup>Lorenzo Mambelli\*. <sup>1</sup>Department of Pediatrics, S. Maria delle Croci Hospital, Ravenna, Ravenna, Italy; <sup>2</sup>University Hospital Arcispedale Sant'Anna, Ferrara, Italy

10.1136/archdischild-2019-epa.653

From June to August 2018, 6 infants with pertussis aged between 1 and 9 months (4 were 3 months old, and the other two 1 month and 9 months old respectively) were admitted to a General Paediatrics Operating Unit. Their hospitalization period lasted between 3 and 11 days (mean 7.2 days). Three infants required oxygen therapy. No