

P1-236 HABITUAL NUTRIENT INTAKES DURING EARLY PREGNANCY OF WOMEN LIVING IN IRELAND

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At no point in the life cycle is nutrition more important than before and during pregnancy. Diet is a major environmental factor influencing the development of the embryo and fetus, while maintaining maternal health. Impaired development in utero may “programme” the fetus for developing metabolic diseases in adulthood. The aim of the present study was to examine maternal nutrient intakes during early pregnancy. 257 healthy women were recruited from the antenatal clinic at the National Maternity Hospital in Dublin. Participants were considered for this study if they were between 10 and 18 weeks gestation, had a singleton pregnancy, with adequate English. All participants completed a 3-day food diary and recorded in as much detail as possible their food and beverage intakes. Collected data were entered into NetWISP version 3.0 (Tinuviel Software, Llanfechell, Anglesey, UK) and statistical analysis was carried out in SPSS version 15.0 (SPSS Inc.). Results showed that mean daily intake of certain micronutrients were insufficient and did not meet the recommended dietary allowances (RDA) for pregnancy. Mean dietary intake of folate was 271.3 µg (SD 111.4), vitamin D was 2.7 µg (SD 2.1), calcium was 877.8 mg (SD 315.8), and iron was 11.1 mg (SD 3.7). Alarming, only 2 (0.8%) women met vitamin D recommendations, while only 8 (3.1%) women met folate recommendations. Sodium intakes were above recommended levels for the general population. These data highlight the urgent need for better public health interventions among pregnant women and consideration to fortify foods with folic acid in Ireland.

P1-237 POST-SEPARATION PARENTING ARRANGEMENTS: PATTERNS AND DEVELOPMENTAL OUTCOMES

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Introduction Changes in family law in many countries have preceded research addressing the developmental impacts of different patterns of parenting after separation. We use data from the Longitudinal Study of Australian Children (LSAC) to examine differences in developmental outcomes due to different patterns of overnight care among infants and children with parents living elsewhere.

Analysis LSAC includes a national random sample of Australian children with a 2-stage clustered design. The analysis included 258 0–1 year olds, 509 2–3 year olds and 1292 4–5 year olds. Logistic and linear regression analysis was used to assess the effects of care arrangements, parenting style, relationship and demographics on developmental outcomes. Care arrangements were classified as shared care, primary parenting and rare contact based on the frequency of overnight stays with the parent living elsewhere.

Discussion Shared care was associated with higher irritability and visual monitoring of parents in 0–1 year olds. 2–3 year olds in shared care showed lower levels of persistence and more problematic behaviours on the Brief Infant-Toddler Social Emotional Assessment Problems Scale than the primary care group. However by 4–5 years independent effects of care arrangement on emotional and behavioural regulation outcomes for children were no longer evident.

Conclusion This study reinforces the importance of considering children’s needs at different developmental stages in developing family law policy and legislation.

P1-238 THE POTENTIAL CONTRIBUTION OF EPIDEMIOLOGY TO THE RESOLUTION OF DISPUTES ABOUT CAUSATION IN PERSONAL INJURY LAW

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Legal courts have a poor track record in interpreting statistical evidence. They are notoriously suspicious of such evidence and uncomfortable with the idea of basing legal conclusions upon it. In this presentation we will argue that a large part of this suspicion stems from a lack of understanding about how to interpret clinical evidence, particularly where the issue in question is one of factual causation. The aim of this presentation is to promote the role of clinical epidemiology in resolving legal disputes about causation in certain categories of personal injury litigation. Clinical epidemiologists can help in two ways with the resolution of legal disputes over probabilistic causation. Firstly, they can provide prediction models, that, ‘personalised statistical evidence’ for consideration by the courts and, secondly, they can provide guidance to the courts on how to assess the validity of previous clinical research, and on how to interpret research findings. Using the high profile UK House of Lords decision in *Gregg v Scott* [2005] UKHL 2 as an example, this presentation will highlight common and fundamental errors made by lawyers in assessing issues of probabilistic causation. It will then demonstrate how these errors could be redressed through the employment of epidemiological expertise. While epidemiological evidence has been relied upon in the past in toxic tort litigation, it has never before been used in the context of an individual claim for negligent diagnosis.

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P1-239 HOW CHANGES IN THE RATES OF OBESITY AND SMOKING PREVALENCE IN ENGLAND WILL HAVE AN IMPACT ON THE FUTURE INCIDENCE OF CORONARY HEART DISEASE?

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Introduction Smoking prevalence in England has been falling since the 1970s, leading to a substantial reduction in Coronary Heart Disease; but it is now relatively static. At the same time obesity rates have steadily been rising. This is confounded by the fact that giving up smoking has been associated with significant weight gain.

Methods We use methods developed for the English Government Tackling Obesities to predict future trends in obesity and their attendant health problems. We then apply them to future tobacco trends. We then project their impact on future trends in Coronary Heart Disease.

Results Coronary heart disease rates attributable to smoking will continue to decline until 2020, while the rates attributable to obesity will continue to rise. By 2030 rates of Coronary Heart Disease will begin to rise above current rates as CHD attributable to obesity surpass the gains from smoking reduction.

Conclusion If the rise in obesity is unchecked, any benefits to Coronary Heart Disease rates from smoking reduction will be overtaken in the next 20 years by the growth in obesity. This message needs to be understood by policy makers both in England and globally and in particular weight management advice needs to be incorporated into stop smoking services.