Methods This study was conducted among primary school children (6-10 years old) in the middle region of Iraq (five governorates). The total sample composed of 4,089 children randomly selected. The assessment of nutritional status was performed using height for age indicator for chronic malnutrition (stunted), the values were compared with the international reference values defined by the National Center for Health Statistics (NCHS) and classify them into mild, moderate, and sever stunted. The nutrient analysis was done through the dietary assessment using semi-quantitative food frequency questionnaires the assessment was converted to nutrient data (according to nutrient composition of Iraqi food) which was performed using software program especially designed for this study. Diagnosis and recording of dental caries was conducted according to World Health Organization criteria in 1997 using dmfs and DMFs indices for primary and permanent teeth respectively. Statistical analyses were performed using Analysis of Variance and Least Significant Different tests.

**Results** The prevalence of stunted, was found to be 49%, where the mild grade was the most prevalent (29%). The data presented in the study showed that there is a significant difference in mean of caries experience between different grades of nutritional status (P<0.01). The well-nourished children had significantly lower dmfs values (11.76±0.95) than mild (10.44±0.61) and sever stunted (16.32±1.07). Concerning caries experience of permanent dentition, apposite figure were found, well-nourished children had higher DMFS values (2.11±0.93) than mild (1.39±0.07), moderate (1.56±0.10), and sever stunted (1.14±0.18). However all these differences were statistically not significant (P>0.05).

The daily nutrients intake for the well-nourished children were recorded to be for protein  $52.0\pm0.62 \rm grams$ , calcium  $0.63\pm0.01 \rm grams$ , phosphorus  $1.01\pm0.01 \rm grams$ , calcium/phosphate ratio  $0.61\pm0.004$ , iron  $0.01\pm0.002 \rm milligrams$ , vitamin A 6981±84.04 I.U and vitamin C  $0.10\pm0.002 \rm milligrams$ . These amounts tended to be decreased significantly with increased severity of malnutrition. Multiple linear regressions showed correlation between nutrients and dmfs, DMFs with  $R^2$  value 0.7%, 0.5% respectively.

**Conclusion** The oral cavity is considered a mirror of nutritional status of the body. Stunted children with inadequate nutrients intake during growth and development had a significant effect on tooth development and subsequent caries initiation and progression.

PS25

## DISCONTINUATION OF ANTIEPILEPTIC DRUGS IN PREGNANCY: A UK POPULATION BASED STUDY IN THE HEALTH IMPROVEMENT NETWORK (THIN)

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**Background** Since the thalidomide tragedy in the 1960s, many women are concerned with the use of drugs in pregnancy. Antiepileptic drugs (AEDs) are commonly used to treat epilepsy and bipolar disorders in women of child bearing age. However, some AEDs are associated with an increased risk of major congenital malformations. Untreated epilepsy and bipolar disorders in pregnancy may lead to devastating consequences for both mother and child. This leaves women and health care professionals with a dilemma as whether to continue AED medication in pregnancy. Using data from THIN, a UK primary care database, we examined pregnancy as a determinant for ceasing AED treatment.

**Methods** A cohort study of pregnant women receiving AEDs in UK primary care was conducted. We identified women who were prescribed AEDs in the three months before pregnancy. Time to last consecutive AED prescription in pregnancy was estimated whereby discontinuation of therapy was defined by a gap of more than three

months between prescriptions. We identified a control group of twice as many non-pregnant women receiving AEDs. These women were randomly selected, but stratified within five year age bands and matched on indication for AEDs as for the pregnant women Cox's regression was used to compare the likelihood of discontinuing AEDs between pregnant and non-pregnant women.

**Results** In total, 934 women were prescribed AEDs three months before pregnancy. Pregnant women with epilepsy were twice as likely to cease AEDs compared to non-pregnant women (Hazard Ratio (HR):2.00, 95% confidence interval (CI:1.62–2.47). Of 745 women with epilepsy, 601 (80.7%) continued treatment into pregnancy and 465 (62.4%) to the end of the second trimester. Of 1,490 non-pregnant women with epilepsy, 1,242 (83.4%) and 1,071 (71.9%) continued for comparable time periods.

Pregnant women with bipolar disorder or depression were three times as likely to cease AEDs compared to non-pregnant women (HR:3.07, 95% CI:2.04–4.62). Of 54 pregnant women with bipolar disorder, 27 (50.0%) continued into pregnancy, and only 8 (14.8%) to the end of the second trimester. In 108 non-pregnant women with bipolar disorder, 82 (75.9%) and 58 (53.7%) continued for comparable periods.

**Conclusion** Pregnancy is a determinant for the discontinuation of AEDs during pregnancy, especially in women with bipolar disorder or depression despite the potentially severe consequences associated with not treating the underlying illness in pregnancy.

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## PREVALENCE AND ASSOCIATIONS OF LIMITED HEALTH LITERACY IN CHRONIC KIDNEY DISEASE: A SYSTEMATIC REVIEW

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**Background** Chronic kidney disease (CKD) is a prevalent and growing problem, strongly associated with obesity, diabetes, hypertension, and cardiovascular disease. Health inequalities are recognised throughout the CKD pathway, including prevalence of risk factors, prevalence of CKD, progression, and renal replacement therapy. There is evidence that an adequate level of health literacy (defined as 'the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand, and use information in ways that promote and maintain good health') contributes to improved disease management, and that inadequate health literacy is a potentially modifiable determinant of poor health outcomes and health inequalities in people with chronic disease. The aim of this review was to synthesise and critically appraise the literature evidence on the prevalence and associations of limited health literacy in CKD.

**Methods** Seven databases were searched using terms for CKD and health literacy (HL). Cross sectional studies, and baseline data from cohort and randomised controlled trials were included where they assessed and presented the prevalence of limited HL using a validated tool in adults with CKD of any stage. The primary outcome was an objectively measured prevalence of limited HL in a population with CKD. The secondary outcome was associations of limited HL. Study quality was assessed by two reviewers using standardised criteria. Prevalence values were combined using a random effect model to give overall prevalence.

**Results** 82 studies were identified from searching, of which six met the inclusion criteria. The total number of people with CKD in all studies was 1,405. Five studies were in dialysis or transplant populations, and all were from the US. There was significant heterogeneity in the prevalence of limited HL (9% to 32% (median 25%, inter-quartile range 16%)). The pooled prevalence of limited