Background and aims There is increasing evidence that childhood vitamin D deficiency is associated with poorer overall health and associated with numerous diseases. We wanted to assess knowledge and use of vitamin D in mothers of the Somali Community in West London with the aim of improving knowledge, access to vitamin D and reducing the burden of vitamin D associated healthcare problems in mothers and their children.

Methods A representative sample of Somali individuals were contacted by HASVO (Harrow Association of Somali Voluntary Organisations) and three meetings conducted with these community members. Participants were asked to complete a detailed vitamin D questionnaire assessing baseline knowledge of vitamin D deficiency, awareness of its importance and current uptake. This was followed by an educational presentation and discussion. Questionnaires and presentations were in English and translators provided for those who required assistance.

Results 45 participants completed the questionnaire. Most participants had heard of vitamin D deficiency (33), but the participants and their children were at high risk of it through lifestyle factors, particularly low sun exposure. The discussion exposed variability in both lay health beliefs and experiences with healthcare professionals.

Conclusion Phase I of this study has shown that (i) there is a current vitamin D crisis in this community and knowledge is variable, (ii) clearer community information is needed about vitamin D dosage, (iii) access to cheap vitamin D needs to be better publicised. Thus, we propose that a vitamin D campaign is needed and will be rolled out in Phase II.

PO-0985 VITAMIN D DEFICIENCY IN THE HIGH RISK SOMALI COMMUNITY IN WEST LONDON: PHASE I UNDERSTANDING THE COMMUNITY

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10.1136/archdischild-2014-307384.1602

Introduction Vitamin D is essential for bone and skeletal health. The major natural source of Vitamin D is from skin exposure to sunlight. Current evidence suggests that there isn’t enough ambient ultraviolet sunlight from October to April in UK (UK). Similarly, there are reports of rickets re-emerging in parts of UK. There is no internationally agreed consensus regarding cut off value denoting Vitamin D insufficiency/deficiency. Variable practice exits in treating symptomatic and asymptomatic children with Vitamin D insufficiency/deficiency.

Aim To evaluate our current practice in investigating and managing children with subnormal Vitamin D levels (<50 nmol/l).

Method We carried out a retrospective data review on all patients <17 years of age who had vitamin D levels checked in a District General Hospital setting. Data was collected from 2008–2012 and analysed using Microsoft excel.

Results Vitamin D levels were checked on 136 occasions in 89 patients (60% male). 41% of the values were above 50 nmol/l while 20% were <20 nmol/l. ~3/4 values of <20 nmol/l were from children of Indian and Pakistani origin. 80% of patients with values <50 were treated with oral Vitamin D supplementation. Treatment dose varied from 400–10000 IU/day to 20000–40000 IU/week (ergocalciferol or cholecalciferol).

Conclusion Our data reiterates lack of unified guidance and variable practice amongst clinicians managing Vitamin D deficiency/insufficiency. Careful attention is required when managing South Asian children with chronic illnesses. There is urgent need for multicentre/national research and unified guideline for prevention and treatment of Vitamin D deficiency in children.

PO-0986 INVESTIGATION AND MANAGEMENT OF VITAMIN D DEFICIENCY/INSUFFICIENCY-A SERVICE EVALUATION

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10.1136/archdischild-2014-307384.1603

Background There is a recognized association between iron deficiency anaemia (IDA) and vitamin D deficiency. This study aimed to identify the prevalence of IDA and low vitamin D levels in children under two years of age in an outpatient clinic setting.

Aim To determine the prevalence of IDA and vitamin D deficiency in children under two years of age presenting to a large urban children’s hospital.

Methods We conducted a prospective study in the Paediatric Department at a large urban teaching hospital in a developing country. We included 200 consecutive children aged 1–24 months presenting to the hospital with an acute febrile illness between March and June 2010. We excluded patients with chronic illness, malnutrition or blood transfusion in the last 3 months. Data was collected on demographics, maternal education, previous blood group typing, and results of vitamin D and IDA tests. Vitamin D levels were classified as normal (<40 ng/ml), insufficient (40–50 ng/ml), and deficient (<40 ng/ml). IDA was defined as a Hb <11 g/dl in girls, and <12 g/dl in boys, with a Hb decline of 2 g/dl or more from the previous measurement, a serum ferritin <10 μg/l, and a negative response to iron therapy. A non-parametric test was used for statistical analysis.

Results A total of 200 children were included in the study, with a mean age of 10.9 months (SD 4.3). The prevalence of IDA was 8.5%. The prevalence of low vitamin D levels was 34.5%. Children with IDA were more likely to have low vitamin D levels compared to those without IDA (p = 0.01).

Conclusion The prevalence of IDA in children under two years of age presenting with acute febrile illness was 8.5%, and the prevalence of low vitamin D levels was 34.5%. There was a significant association between IDA and low vitamin D levels. This highlights the importance of screening for both deficiencies in this population.

PO-0987 FEVER IN CHILDREN WITH ACUTE RESPIRATORY INFECTIONS: PRACTICES AND RECOMMENDATIONS

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10.1136/archdischild-2014-307384.1604

Background and aims There is no internationally agreed consensus regarding cut off values of vitamin D in children. Aims To assess treatment practices versus recommendations for fever treatment in children with acute respiratory infections (ARI).

Methods We analysed 189 clinical records of children hospitalised with ARI, aged from 4 months to 7 years: 4–12 months – 23.8%; 1–3 years – 67.7% and older than 3 years – 8.5% children. The exclusion criteria were: children under 3 months; congenital malformations or chronic diseases; history of febrile seizures. The review included treatment of febrile syndrome in different stages of paediatric healthcare (home treatment, primary medical care and in hospital).

Results Results of the research revealed many deficiencies in therapeutic management of the febrile syndrome: in 28% cases was an inappropriate use of antipyretic drugs by caregivers (at body temperatures below 38°C); the adequate rehydration of children with fever was provided only in 22% of children; Metamizole was used in 23.4%. The source of information for parents regarding the treatment of children with fever was not always the doctor; many parents followed the advices from their relatives, friends and pharmacist. Family doctors and paediatricians were consulted in only 43.9% and 10.1% cases, respectively.

Conclusions Results of the study showed that the existing practices in the fever treatment in children with ARI are explained by low level of information of caregivers regarding the care of a sick child at home and some divergence between international and national recommendations for fever management in children.