toothpaste fluoride concentrations, brushing techniques, and frequency of dental visits.

Results 50 staff members were approached; 30 doctors and 20 nurses. 38% had more than 10 years' experience.

Abstract G137(P) Table 1

Question	Correct Answer	% Correct
Tooth decay: most common chronic childhood disease	Yes	52
Age child should drink from a cup	12months	52
Erosion occurs brushing teeth <30mins after drinking juice	Yes	72
Eating a piece of cheese is tooth protective	Yes	46
Begin tooth brushing as soon as teeth appear through gums	Yes	96
Tooth brushing frequency	2 per day	90
Age requiring tooth brushing assistance	<7 Years	76
Toothpaste's fluoride strengthens enamel	Yes	86
Optimal Fluoride concentration in childhood's toothpaste (parts per million)	1350-1500	54
Advisable frequency of dental visits per year	2	90

Conclusions Our data demonstrates the current knowledge gap regarding basic dental advice. In response we have initiated training sessions for healthcare staff, provided space for dental examination in our admission proforma and developed a family/staff information leaflet, making these widely available.

REFERENCE

1. <http://www.sign.ac.uk/pdf/qrg83.pdf> Prevention and management of dental decay in the preschool child. SIGN Nov 2005.

G138(P) DESIGNING A BEHAVIOURAL-EDUCATIONAL INTERVENTION USING INTERVENTION MAPPING TO REDUCE THE HIGH RATES OF PAEDIATRIC ASTHMA HOSPITAL ADMISSIONS IN AN INNER-CITY AREA OF BIRMINGHAM

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Aim To develop asthma self-management programme working with children and families to prevent paediatric asthma emergency admissions in order to provide effective care and promote behaviour change (BC) towards effective management.

Method An evidence review on BC interventions for asthma was conducted; quantitative admissions data was collated; qualitative research was used to explore family and patient experiences. These were used in the six processes of intervention mapping: needs assessment, proximal programme objective matrices, theory-based methods and practical strategies, intervention design, adoption and implementation, and evaluation.

Results The six stages demonstrated that self-management behaviours are a critical component of asthma care and that childhood asthma care may be influenced through behaviour and environment. The process showed how intervention methods based on self-regulatory theory (Leventhal *et al*, 1984), behaviour change taxonomy (Michie & Abraham, 2008) and self-efficacy theory (Bandura, 1997) are applicable to self-management behaviours and can be translated into practical applications for asthma self-management. Step one involved conducting a literature review, collecting preliminary data and developing the asthma PRECEDE model. Step 2 highlighted the at-risk group and explores relevant theories/frameworks e.g. Asthma self-management behavioural framework (Bartholomew *et al*, 2001). Performance objectives and determinants

were established in order to devise a change objective matrix. Step 3 linked BC techniques to determinants and change objectives in order to change behaviour. Step 4 was the intervention design targeting asthma self-management. Key features were child centred teaching including a video and facilitating family/GP links. Step 5 encompassed the logistics of the intervention i.e. delivery mode, costing and outcome expectations e.g. perceived benefits and better health. Step 6 outlined how the intervention would be evaluated including baseline and follow-ups, review of ED attendances, self-reported measures, Asthma Quality of Life Scales, Paediatric Asthma Control Test and Parental/Child Self-efficacy Scales.

Conclusion The intervention mapping process aided the design of an intervention tailored to the specific needs of a child/family. The intervention should help a child progress to more advanced asthma management and promote a tie between child/family and GP. Implementation and evaluation of this intervention is underway at Birmingham Children's Hospital to tackle the paediatric high rates of asthma hospital admissions.

G139(P) FUNCTIONAL ABDOMINAL PAIN IN CHILDREN: DIAGNOSIS, INVESTIGATION AND MANAGEMENT IN A SECONDARY CARE OUTPATIENT DEPARTMENT

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Aims To review;

- Whether clinical diagnostic criteria are met
- Investigations ordered and the results of these
- Management and referrals to other healthcare professionals
- Patient outcome

Methods We performed an electronic search of outpatient letters, created or altered between 01/01/2011 – 31/12/2011, that included the terms: chronic abdominal pain, recurrent abdominal pain, functional abdominal pain, functional dyspepsia, irritable bowel syndrome, abdominal migraine, and functional abdominal pain syndrome. We reviewed the letters, investigations and results, management options and outcome of the patients with a new diagnosis of a functional abdominal pain, until June 2012. The following diagnostic criteria were used: age: 4–18yrs, at least 3 episodes of pain over 3 months, no "alarm symptoms", and normal examination. The use of faecal occult blood test as a screening tool was noted in the investigations section.

Results We identified 25 newly diagnosed patients; 10 females, mean age 9.68yrs. Four patients did not fulfil the clinical criteria for diagnosis. A total of 131 investigations were carried out for 21 patients; 4 patients had no investigations done. No patient had a faecal occult blood test.

Investigations carried out in primary and secondary care:

There were 12 abnormal results; only 2 had a clinical significance (one patient diagnosed with constipation following an abdominal X-ray, one patient was referred to surgeons with an incidental finding of a pelvic dermoid cyst on abdominal X-ray). A wide range of pharmacological interventions were recommended with unknown value. No patients were offered cognitive behavioural therapy or referred to CAMHS. Eight patients monitored or altered their diet but only 2 were referred to a dietician. In total, 53 appointments were offered and 39 attended. Fourteen patients cancelled or did not attend their follow up appointments, 5 patients had resolution of their symptoms and 6 were discharged back to their GP.

Conclusions

1. Clinical investigations are unlikely to inform the management and outcome of children with chronic abdominal pain, no "alarm symptoms" or relevant family history, and normal examination.
2. Reassurance and education should be the primary therapy in children.
3. "Open access" clinic appointments, following the initial consultation, could reduce the number of cancellations and DNAs in Outpatient Clinics.