deviations above 0.5. Sex is differentially represented ($\chi^2(1)=5.59$, $p=0.02$), with males being slightly overrepresented (relative deviation > 0.1).When compared to the ethnic breakdown of a Scottish city, chi-square tests revealed that the prevalence of Arabic patients in this sample is 10 times more than the prevalence in the city population (5.4% vs. 0.52%, $\chi^2(1)=154.77$, $p<0.0001$), Asian Indian patients is 3 times higher in this sample than in the city population (4.5% vs. 1.34%, $\chi^2(1)=25.51$, $p<0.0001$),Asian Pakistani patients is 4 times higher than in the city population (18.7% vs. 4.35%, $\chi^2(1)=164.53$, $p<0.0001$), and the prevalence of White Scottish patients is 0.4% that of the city population (34.7% vs. 83.7%, $\chi^2(1)=581.49$, $p<0.0001$). By plotting the mean values of the MCV (Mean corpuscular volume) and Hb (Haemoglobin) against the ferritin values in this sample, it was noted that at a serum ferritin value of 4ug/L, the mean Hb falls below 100g/L and at serum ferritin values <7ug/L, the mean MCV was below 75fL. There were similar findings in the community group. Wide range of non-specific symptoms noted in the NB group.

Conclusions Ethnic minority groups, socio-economic deprivation, males aged 1 to 4 years are identified as high-risk factors for iron deficiency in the population presenting to the local healthcare settings. Also, Hb and MCV tends to fall at very low levels of serum ferritin. Iron deficiency anaemia occurs at later stages of iron deficiency and therefore, ID should be considered in any child with above-mentioned high-risk factors, presenting to health care settings with non-specific symptoms.

British Association for Community Child Health

616 INNOVATIVE £50 HEADSET AND FREE APP SENT BY POST TO MANAGE GLUE EAR -THE MOST COMMON CHILDHOOD HEARING LOSS- WHEN SERVICES WERE CLOSED DURING THE C19 PANDEMIC

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10.1136/archdischild-2021-rcpch.102

Background Hearing loss from glue ear affects ~1 in 10 children starting school in UK/Europe. Of all children globally with a hearing loss, fewer than 10% of children have access to hearing aids: affordable solutions are needed. Studies showed children with OME hear better with bone conducting headsets. During COVID-19 we investigated whether children with glue ear (also known as Otitis Media with Effusion, OME) without access to audiology or grommet surgery during the Covid pandemic, could be aided remotely with £50 bone conduction kits and the HearGlueEar app.

Objectives

1. Could families pair and set up a product set (requiring Bluetooth connectivity) themselves
2. Could children's quality of life be improved with remotely managed hearing support.
3. Can glue ear be successfully managed remotely.
4. Does this management affect the number of grommet operations required?

Methods Starting July 2020, during COVID-19, children aged 3–11 years with OME and on a grommet waiting list were invited to a single arm, prospective study. They received the kit, instructions and HearGlueEar app by post. By 3 weeks parents were asked to charge and pair the devices, attend a remote consultation and complete an OMQ-14 questionnaire. Remote follow-up lasted 3 months.

Results 82% (26 children) of those waiting for grommet operation list at the time of first lockdown in 2020 joined the study.

Children experienced more challenging listening situations during the pandemic with remote learning, social distancing and masks obscuring lip reading.

Families and the children felt empowered to manage their child's condition at home and school.

100% of families set up the product set remotely without professional help. Although some families needed additional support through the study therefore contact with a professional to trouble shoot was important.

Quality of life (OMQ-14) responses were 90% positive. Comments included: 'Other people have said, wow his speech is clearer.', 'It is making a real difference at home.', 'He said over and over again, 'I can hear everybody, wow.', 'It is no exaggeration to say this has made an astronomical improvement to his quality of life'. 'She is getting on really well with the headphones - pairing them with the iPad at home is simply brilliant.' One child said 'I can hear my best friend again'.

20% of those in the study avoided grommet operations: either choosing this management option as an alternative or successfully supporting their child's hearing until the glue ear self-resolved.

Conclusions Posting a bone conduction kit, HearGlueEar app and remote consultation is an effective management option for children with glue ear. This reduced the need for some grommet operations affording cost-savings and relieved hospital waiting lists. Children's hearing was supported at home and at school as well as challenges experienced in the pandemic with on-line education, social distancing and communicating with face coverings.

https://medrxiv.org/cgi/content/short/2021.01.21.21249496v1

Association of Paediatric Emergency Medicine

617 THE CHILDREN MAY HAVE GONE BUT CHILDREN UNDER 1 MONTH HAVE NOT. EMERGENCY DEPARTMENT ATTENDANCES IN UNDER 1 MONTH OLDS DURING THE 2020 COVID-19 PANDEMIC

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10.1136/archdischild-2021-rcpch.103

Background Research during 2020 suggests UK Paediatric Emergency department (PED) attendances dropped by 30% at the start of the first National Lockdown (March 2020). Our PED (28,000 attendances (2019) vs 21,000 attendances (2020)) saw a similar drop in attendances but anecdotally noted babies under 1 month increased. Throughout 2020 many healthcare providers (including General practitioners (GP), Health Visitors (HV) and midwives) moved from routine 'face to face' (F2F) review to virtual contact, plus

redeployment of staff/clinical spaces and alterations to care pathways. Strict rules on social distancing and reduced social interactions were enacted on a national level. Locally, COVID related pathways and cohorted areas evolved but all patients booked into PED as per pre-COVID practice. We sought to analyse attendances in this age group and institute changes using quality improvement (QI) methodology.

Objectives Reduce the number of avoidable PED attendances of babies under 1 month.

Methods PED attendances 01/01/2019 to 31/12/2020 of infants under 1 month were analysed. Attendances were plotted on a monthly run chart with a baseline median calculated on 2019 data. Discharge diagnoses for the first 6 months of 2020 were recorded and analysed to give an overview of attendance reasons and areas on which to focus interventions. An 'avoidable attendance' was classed as 'feeding problem' or 'jaundice' as these do not typically require specialist paediatric emergency medicine input. Monthly overall PED attendances and hospital live birth numbers 2019–2020 were noted. Interventions included multi-disciplinary team meetings with Maternity, Paediatrics and Safeguarding. Care pathways (hospital & community) were reviewed and extra resources allocated to maternal feeding & support.

Results A total of 805 infants under 1 month attended PED January 2019 to December 2020, n=372 (2019) vs n= 433 (2020). The baseline median of monthly attendances under 1 month old was 29 patients per month (2019) vs 36 patients per month (2020). Live births were similar 5143 (2019) vs 5109 (2020). PED discharge diagnosis January to June 2020 (n= 224) showed 27% (n=61) due to 'jaundice' and 21% (n= 47) due to 'feeding problems' with none of these infants admitted. PED attendances under 1 month old dropped from a peak of 55 patients (July 2020) but has not dropped to consistently below baseline median. Alternative pathways to access services were not included in analysis. The increased number via PED might reflect the true number normally seeking healthcare input (e.g. HV, GP, Paediatrics and Maternity services) but an unintended consequence of COVID-19 related service alterations means PED is the default route for F2F review or parental support/reassurance. Separate in-depth analysis of 2020 hospital wide attendances under 1 month old suggests a wider system issue.

Conclusions During 2020 under 1 month old PED attendances increased above the baseline of 29 patients to 36 patients per month despite overall PED attendances dropping 25% compared to 2019. Analysis suggests 50% were jaundice/feeding related. Interventions across our local healthcare system have yet to demonstrate a sustained and statistically significant drop below the baseline median. Local analysis continues and long-term targets on avoidable PED attendances may have merit.

British Association of Child and Adolescent Public Health

618 KEEPING OUR CHILDREN SAFE: PILOTING A HOSPITAL-BASED HOME-VISITATION PROGRAM

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10.1136/archdischild-2021-rcpch.104

Background Attempts to prevent child home injuries have rarely been implemented in hospital settings which present an important point in time for intervening. The SHABI program recruits at-risk families presenting with child injury to the Emergency Department. Medical/nursing students conduct two home visits, four months apart and provide safety equipment and guidance.

Objectives To investigate the impact of SHABI on participating families' home-safety.

Methods The pilot was conducted between May 2019-March 2020 in northern Israel, an area with high child injury rates. Eligibility included families with preschool children who incurred a home injury. Home-safety was assessed by observation through the 'Beterem' checklist. Parents' views, knowledge, awareness of dangers and report of home injuries was assessed by questionnaire at the start of each visit.

Results 352 of 773 eligible families agreed to be contacted. 135 participated, 98 completed both home visits. Significant improvement in home-safety items was observed 4 months after the first visit (14 [IQR12–16]) vs (17 [IQR15–19]; $p<0.001$), accompanied by an overall increase in home safety (mean±sd 71.9%±9.5% vs 87.1%±8.6%;$p<0.001$). 64% reported greater awareness of dangers, 60% affirmed home was safer, and 70% valued the equipment. No difference was found in prevalence of injuries (14 of 98 families prior and 8 after visit ($p=0.17$). Home visitors affirmed the usefulness of visits and reported benefiting from the experience of working with disadvantaged families.

Conclusions The program, which included recruitment in a hospital emergency setting and use of healthcare students as home visitors, was successfully implemented with sustained improvement in home safety.

British Society for the History of Paediatrics and Child Health (ePoster presentations only)

619 HISTORY OF ADOPTION IN UK

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10.1136/archdischild-2021-rcpch.105

Background Informally transferring children to new home & looking after them is not new.

Adoption is permanent removal of a child into another family has only been legislated in the UK in 20th century.

Objectives To find out the History of Adoption in UK.

Methods Literature review is conducted to review the History of Adoption in UK.

Results Much of the research has been done by Dr Jenny Keating, Senior Research Fellow, Institute of Historical Research.

1st legislation was made as Adoption of Children Act 1926 in England & Wales. This is followed in 1929 in Northern Ireland & 1930 in Scotland. Thereafter in almost every subsequent decade, new laws have been introduced to further regulate the process until 2002 when 'The Adoption & Children Act' set out.

Conclusions Legalised child adoption was a practice introduced much later in Britain than the United States or many Commonwealth countries. Child adoption had no legal status in