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 < 7 ug/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

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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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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

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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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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