GP EVENTS BEFORE AND AFTER COVID-19 INFECTION AMONG CHILDREN AND YOUNG PEOPLE IN NORTHWEST LONDON

Sandeepa Arora, Francesca Neale, Dougal Hargreaves. Centre for Paediatrics and Child Health, Faculty of Medicine, Imperial College

Aims Covid testing and primary care data for Children and Young People (CYP) has not yet been linked at the national level in England. However, such linkage has been established using the Discover Whole System Integrated Care (WSIC) database in Northwest London (NWL). We describe pattern of primary care utilisation, among CYP of 0 – 24 years of age in NWL before and after testing positive for Covid-19 infection. The insights are needed in understanding the impact of Covid-19 infection on both the patient and the health care system.

Methods We conducted a retrospective cohort study using routinely collected primary care health care data in NWL from the Discover WSIC de-identified database. It is a local warehouse of electronic patient records for research, the database is de-identified.

Four cohorts were studied to represent CYP at various key Covid-19 vaccination focused age groups of 0-4 years, 5-11 years, 12-15 years and 16-24 years. Their GP events 180 days preceding and following the confirmed PCR positive test result were analysed. GP events were counted as number of distinct days with one recorded activity.

Results By 16th February 2022, positive PCR results were obtained for 104,702 CYP, 14% (d=745,268) of registered CYP population in NWL. The frequency of GP events in the first seven days of the post-test period was similar to the frequency in the seven days preceding, however outside this period they differed substantially, from 279 per 1,000 pre-test to 92 per 1,000 post-test. The 16-24 year age group showed the largest decrease at 150 to 180 days after a confirmed positive PCR test result, from 1,290 GP events pre-test to 195 post-tests. There was no increase in GP events for any age group from two weeks post confirmed PCR positive test.

Conclusion Our analyses showed that there is evidence of increase GP activity by CYP a week before and after a Covid-19 infection diagnosis. However, we did not find any evidence at population level of prolonged post Covid-19 infection symptoms for which GPs were contacted.

HOW DID THE FIRST COVID-19 LOCKDOWN AFFECT GENERAL PRACTITIONER CONTACTS WITH CHILDREN AND YOUNG PEOPLE?

Kimberley Foley, Edward Maile, Alex Bottle, Francesca Neale, Russell Viner, Simon Kenny, Azeem Majeed, Dougal Hargreaves, Sonia Saxena. Department of Primary Care and Public Health, Imperial College London; UCL Great Ormond St. Institute of Child Health, London, UK; Alder Hey Children’s Hospital NHS Foundation Trust, University of Liverpool; Mohn Centre for Children’s Health and Wellbeing, Imperial College London

Aims To examine the impact of the covid-19 pandemic on total, face to face and remote general practitioner (GP) contacts with children and young people aged under 25 years in England before and after the first lockdown in the United Kingdom (March to June 2020).

Methods Longitudinal trends analysis using electronic health records from the nationally representative Clinical Practice Research Datalink Aurum database. We included all children and young people aged <25 years registered with a GP any-time during the study period (January 2015 to October 2020). We assigned their GP contacts according to their age (years) on the date of the contact: <1, 1-4, 5-9, 10-14, 15-19, 20-24.

Our main outcomes were total, face-to-face and remote weekly contacts with a GP. Secondary outcomes were weekly contacts with GPs for respiratory illnesses (upper respiratory tract infections, lower respiratory tract infections and asthma) and common non-transmissible conditions (urinary tract infections, diabetes, epilepsy and appendicitis). For all outcomes, we compared the number of contacts during the first UK lockdown (March to June 2020) with the mean number of contacts for comparable weeks from 2015 to 2019.

Results Our study population included 4 307 120 million children and young people who had 47 607 765 GP contacts. Total GP contacts fell by 40.7% (95% CI: 40.7, 40.8) during the first lockdown compared with previous years. Children
IMPROVING ADOLESCENT WELLBEING THROUGH REDUCING SCREEN TIME USAGE

James Spence, Sadhia Khan, Connor Qiu, Mando Watson. Imperial College Healthcare NHS Trust

Aims The use of digital devices such as smartphone and tablets has increased substantially over the past few years (1). This has been well documented in the literature to have detrimental effects on all aspects of child and adolescent physical and mental health (2). Novel grassroots approaches to reduce screen time that are actionable in the local community with notably fewer contacts for respiratory illnesses. This change reflects a combination of altered healthcare seeking behaviour, lower prevalence of some conditions (notably fewer respiratory illnesses due to fewer social contacts), and changes in service provision. A major shift from face-to-face to remote contacts for common non-transmissible conditions mitigated overall falls.

Conclusion Children and young people’s contact with GPs fell, particularly for face-to-face assessment during the first pandemic lockdown, with notably fewer contacts for respiratory illnesses. This change reflects a combination of altered healthcare seeking behaviour, lower prevalence of some conditions (notably fewer respiratory illnesses due to fewer social contacts), and changes in service provision. A major shift from face-to-face to remote contacts for common non-transmissible conditions mitigated overall falls.

REFERENCES

SINCE ITS ESTABLISHMENT IN 1994, HAS THE LADY HEALTH WORKER PROGRAMME HAD ANY IMPACT ON INFANT MORTALITY IN PAKISTAN?

Aysha Adil, Mominahe Tauseef Khan. University College London

Aims Addressing child mortality is a keynote target of the Sustainable Development Goals (SDGs). Infant mortality in Pakistan has reduced from 86 (per 1000 live births) to 62 between 1990 and 2018. During this period, the inauguration of a primary health intervention in the form of the 1994 Lady Health Worker Programme (LHWP) was set up with a specific emphasis on the health needs of women and children. Whilst a reduction in infant mortality occurred simultaneously to the implementation of this intervention, a systematic assessment of the true impact the LHWP has had on infant mortality and its determinants has not been conducted.

Methods Mosley and Chen’s 1984 seminal framework on child survival is used as a basis to assess LHWP’s effect on infant mortality – which can be further separated into neonatal and post-neonatal mortality. Literature sources were gathered via a literature review search strategy. Analysis of proximal determinants of infant mortality is limited to person-aliseenvironmental contamination, maternal factors and nutritional factors. Also, key socioeconomic distal determinants of infant mortality are assessed in the form of community-level, household-level and individual-level factors.

Results Results show the LHWP has contributed to a fall in neonatal mortality. A policy shift allowed Lady Health Workers (LHWs) to become vaccinators and administer tetanus toxoid (TT) vaccinations. The increased social mobility of LHWs contributed to a substantial reduction in the number of neonatal tetanus cases. Due to the collective effort of LHWs across Pakistan, in 2010 it was reported that 84% of new-borns were protected at birth from neonatal tetanus (Khan et al., 2012). Of note, initiation of early breastfeeding (and colostrum feeding) has contributed to LHWP success in reducing neonatal mortality, by encouraging transition from cultural practices to evidence-based child nutrition practices. An 11% difference was observed in mothers who began to breastfeed...