

## **The Children of 2020**

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Many countries including Ireland<sup>1</sup>, the US<sup>2</sup>, and England<sup>3</sup>, have reported on how children have fared during this pandemic year 2020. All paediatric commentators concur. Fewer children become infected and they have a milder clinical course. When exposed to the infection, children under 12 years are less than half as likely to acquire the virus. They account for 6% of Covid-19 cases despite representing 25% of the population.

One explanation relates to the ACE2 (angiotensin converting enzyme) receptor site. The renin-angiotensin system originally known for its role in blood pressure control, is also a critical trigger of inflammation in various body organs including the respiratory tract. The SARS-CoV-2 spike protein binds to the cell ACE2 in the nasal mucosa, the first point of contact. This promotes internalisation of the virus into human cells. There is an age-dependant expression of ACE2. Its activity is lower in children compared with adults<sup>4</sup>. Another explanation is that coronavirus infections associated with colds in children is providing some protection. Coronaviruses account for 15% of colds. Children under 2 years have 5 or more respiratory infections annually. They have 44 days per year with mild URTIs. The activation of adaptive immunity may have a protective role.

These findings about Covid-19 are very different to children's susceptibility to influenza infection. Twenty-five per cent of children contract influenza each year compared with 5-10% of adults. During the 2018/2019 season, 1,245 children were hospitalised with influenza. For the forthcoming winter the HSE's National Immunisation Advisory Committee (NIAC) has recommended the influenza vaccine (LAIV) for all children aged 2-17 years inclusive<sup>5</sup>.

The restrictions and lockdowns, implemented last March, have had major educational and psychological impacts on children. It is the biggest sociological test since the second world war. From a young age, children spend a large proportion of their time in the school setting. It is where they are educated, make friends, and participate in social and cultural activities. School is the vehicle through which the State channels much of its investment in children.

In England 575 million school days were lost, the corresponding number for Ireland was 56.7 million school days. The academic progress of children was slowed down or halted during the school closure. The acute withdrawal from their teachers was both confusing and difficult for them to comprehend.

Christakis<sup>2</sup> recently pointed out that the virus will leave a long trail. Covid-19 has changed the beginning of life for many millions of children. Every child has only one childhood and it passes very quickly<sup>6,7</sup>. The most notable deficits have been encountered in younger children. They have been denied the early building blocks of reading and early numeracy. One of the best markers of a good educational achievement is the child's reading skills at age 8-9 years. US data found that 23% of children with poor reading skills failed to graduate from high school. The problems are worse for disadvantaged children. In the UK, by time children reach GCEs, those from poor backgrounds are 18 months behind their middle-class peers. There are widespread concerns that the school closures will have further widened this gap. The crisis has exposed and amplified the existing inequalities facing children. If the schools had failed to reopen after the summer holidays, we would now be facing an intergenerational crisis.

The damage to children goes beyond education. They were denied contact with their grandparents and their friends. Children need to constantly mix with other children in order to develop their linguistic and social skills. There were lost events, birthdays, and milestones.

The 10% of children with special educational needs and disability have faced a set of particular challenges. There are 7,728 children attending special schools, and 6219 children attending special classes in normal schools. There are 37,500 children being supported by 15,950 SNAs. During the lockdown a vast network of education and support was removed from these vulnerable children.

Many parents fear that their child may have regressed during the school closures. Very few parents have the necessary skill set to teach children with special needs. Looking after this group of children around the clock has caused stress and burnout among parents. Respite care was reduced or non-existent. One source reported that 70% of parents have stated that their own mental health has declined.

The lockdown made children more vulnerable to the risk of harm. School plays an important role in child protection. Longfield<sup>2</sup> states that in England there is data on the number of children who faced additional risks as the crisis unfolded. She estimates that 6 children in every class grows up at risk due to family circumstances. The toxic trio of domestic abuse, parental alcohol/drug abuse, and parental mental health problems. Job losses and financial stress have compounded the problems. During the school closures these children became more invisible to services. The number of children being referred to social services fell by 20% during the lockdown. In Ireland, Childline reported a 26% increase in calls.

The new school term has started smoothly. A sense of normality has returned despite the background of many uncertainties. The Government's repeated statements that the schools will remain open is highly welcome. Children's needs must be a priority as we work through this protracted Covid-19 pandemic. All Covid-19 documents and directives should have a section dealing specifically with the impact on children.

**References:**

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