

Should coronavirus policies remain in place to prevent future paediatric influenza deaths?

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Received 31 October 2021
Accepted 17 December 2021
Published Online First
30 December 2021

ABSTRACT

The 2019–2020 to 2020–2021 influenza seasons in the USA saw a dramatic 99.5% decrease in paediatric mortality, with only one influenza death recorded during the latter season. This decrease has been attributed to a substantial reduction in transmission, resulting from the various restrictive measures enacted during the COVID-19 pandemic, onset March 2020. The relative disappearance of influenza raises specific policy questions, such as whether these measures should be kept in place after COVID-19 transmission reaches acceptable levels or herd immunity is achieved. Given the nature of these measures as liberty restricting, it is worth discussing their intended outcome and what values they promote. Do these measures in fact promote health, or simply give the comfort of safety while undermining long-term health and individual liberties? I argue that the year-long endurance of the pandemic well into 2021 may have flattened our value landscape into one where health reigns supreme. Discussions are underway regarding whether we should modify previously accepted health risks, such as the risk of contracting influenza. In this paper, I attempt to clarify the values that motivate our policies and discuss how our present historical context has appreciated the value of health. I also provide an analysis of various pandemic policies and their relation to influenza paediatric deaths. Ultimately, the cost of certain measures on values such as education, socialisation and liberty, among others, is too high to justify their use beyond regulating the spread of COVID-19.

INFLUENZA TRANSMISSION DURING THE COVID-19 PANDEMIC

Prior to the 2020–2021 influenza season, paediatric influenza deaths did not vary significantly from year to year. During the past three seasons in the USA, 199 deaths were reported for 2019–2020, 144 for 2018–2019 and 188 for 2017–2018.¹ However, only one death was recorded for the 2020–2021 season, a dramatic 99.5% decrease in mortality.¹

This decrease is best explained by a significant reduction in airborne viral transmission and changes in healthcare-seeking behaviour, both corresponding with the recent pandemic. After the WHO officially declared COVID-19 a pandemic on 11 March 2020, a series of policies were put in place in hopes of limiting transmission of SARS-CoV-2 in an effort to prevent deaths from the disease. Among these were mask wearing, social distancing, quarantine and the closing of locations where high levels of human contact cannot be avoided, such as schools and non-essential businesses. Although the best-estimated fatality rate is 0.00002% for those 0–17 years of age,² children are still able to contract the

virus and transmit the disease to vulnerable individuals even without presenting symptoms,³ justifying the closure of schools.

In addition to official measures, individual behaviour changed significantly during the pandemic, particularly at its onset when there was little understanding of the disease and its health risks.⁴ Health campaigns were launched to promote good hygiene like hand washing and the disinfecting of hands and surfaces, along with personal protective behaviours like isolating when sick, social distancing and mask wearing.⁵

After vaccines became readily available, directly lowering COVID-19 transmission and related deaths, many pandemic measures were relaxed or removed. In May of 2021, per the WHO's recommendation, fully vaccinated individuals were no longer advised to wear masks in most settings, businesses resumed operations at full capacity and schools reopened. However, on 27 July 2021, the mask mandate was reinstated for all persons due to rising concerns over coronavirus variants.⁶

Given the similar mechanisms of transmission for COVID-19 and influenza, efforts to reduce propagation of the coronavirus inadvertently resulted in the dormancy of the influenza.¹ Less viral circulation means that less cases were recorded as well as fewer deaths both in adult and paediatric populations. Although most children recover from influenza illness, those of young age and those who are immunocompromised are at highest risk for severe influenza infections requiring hospitalisations.⁷ Severe infection sometimes results in death—deaths which were prevented in part by behaviour changes and policies enacted during the pandemic.

MAINTAINING LIBERTY-RESTRICTING MEASURES

Assuming that human life is of highest value, especially the lives of children, this record-low mortality brings into question whether we should keep these methods in place in hopes of continuing to prevent these deaths. To answer this, it is worth discussing how coronavirus policies prevented influenza deaths, and if the associated trade-offs are acceptable and in accordance with our societal value system.

When COVID-19 posed a novel and unknown risk to life, the protection of the health of the population became the priority. Many of the policies enacted for this purpose compromised on values such as individual autonomy and liberty for the sake of mitigating disease and preventing deaths.

Measures that restrict liberties are usually considered measures of last resort in public health, including in times of a pandemic. In the case of



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To cite: Perdomo D.
J Med Ethics
2022;**48**:794–796.

influenza, the government ‘does not consider [that] preventing these deaths warrants restrictions,...[instead], the cost of restrictions is too great to prevent these deaths’.⁸ In essence, some health risks are tolerated for the sake of preserving liberty and autonomy, and for the sake of promoting social flourishing.

Decreased viral circulation suggests influenza posed a negligible risk to the health of the paediatric population this past season. As coronavirus restrictions are readily lifted, it is likely that influenza mortality will return to the yearly average of 150+ deaths for the upcoming 2021–2022 season. Mask mandates are still in place, and some suggest that these mandates can be used to eradicate the influenza and prevent future influenza deaths.⁹ ‘There’s almost no flu. And how nice is that?...My goodness, if you all had been masked and understood this, we wouldn’t have ever had flu’, says ethicist Laurie Zoloth from the University of Chicago.⁹ Although mask wearing limits viral exposure, it does not confer an immune response and may not be the most effective method of promoting long-term protection against the disease. Furthermore, it is not a measure society is eager to adopt postpandemic.

It is also possible that in our praise of public health’s success, we may be oversimplifying the factors, which contributed to mitigating the disease. It is important to recognise that it was a collection of measures observed at the same time, which curtailed transmission. It would be misleading to grant too much power to any one measure, such as masking alone. COVID-19 halted its spread not only because some people wore masks but also because areas of high interaction were closed or functioned at limited capacity.

SECONDARY CONSEQUENCES OF PANDEMIC POLICIES

Mask wearing, while effective at reducing transmission,¹⁰ has brought influenza immunity to record lows. This is because immune protection develops through exposure to the virus and subsequent recovery. We are now left with a population that may be more susceptible to the influenza than usual. If masking becomes the norm, children’s immune systems may lose practice in dealing with disease, placing them at greater risk for severe infection when they do get sick, if other immune boosting measures like vaccinations are not adopted. Furthermore, mask wearing can give a false sense of protection from disease, as not all masks are equally effective, especially if social distancing is not paired with masking.¹¹

Mask wearing also impairs certain dynamics in human interaction, including impaired facial recognition, verbal and nonverbal communication and emotional signalling in educational settings.¹² Awareness of these effects highlights the importance of relying on vocal tone, body language and other signals to better convey emotion and intentionality while mask wearing.

Vaccination seems a preferable avenue of managing disease as it provides some immunity against viruses. However, researchers are not sure if the 2021–2022 vaccine will be as protective due to insufficient data from the past season.¹³ There is also the possibility that fewer influenza viral strains will be circulating, in which case the vaccine will work well.

School closures significantly limited transmission among children,¹⁴ but presented deficits to education, socialisation and mental well-being, according to U. Penn’s analysis.¹⁵ In fact, for every month closed, there is an estimated \$12 000–\$15 000 yearly loss in U.S. students’ future earnings due to the lower quality of education and reduced motivation students reported. Additional research exploring increasing rates of suicide among children also found that ‘either online schooling or

overwhelming academic distress was placed as the second most suicide stressors’.¹⁶

The negative impact of these measures on children’s education poses practical and ethical concerns worth considering when discussing for how long these policies should stay in place. It is also possible that other factors contributed to the disappearance of the influenza beyond coronavirus policies alone. For one, as many parents worked from home and children attended online schooling, their extended proximity may have allowed for an increase in protective behaviours from parents to children, especially as health became an increasing concern.

HOLDING HEALTH IN HIGH REGARD

The environment of fear and uncertainty generated by the coronavirus have transformed society. A recent study showed that people are making health more of a priority following the pandemic—hence, giving it more value.¹⁷ While the value of health has appreciated, it is not clear whether other values have depreciated.

Human values can be defined as the ideas and concepts which give life meaning and are regarded as important by the individual and society at large. Some common social values include health, liberty, justice, autonomy and cooperation,¹⁸ which are particularly relevant to public health.¹⁹ These values can interact with, coexist, complement, and, at times, oppose one another.

Historically, people have placed a high value on health, which is intimately tied to our regards for human life. The universal esteem for life has been recorded and reflected in numerous laws and religious texts forbidding murder, including Buddhist, Christian, Hindu, Jewish and Islamic texts. Studies show that health remains one of the highest values across age groups,²⁰ with increasing appreciation correlating with age.

Advances in medicine and social programmes have contributed to people living overall longer, healthier lives.²¹ The generations that have grown up in this healthier society are on average less acquainted with disease and death than their predecessors, and as a result report higher rates of death anxiety and risk aversion.^{22,23} This increasing tendency towards risk aversion and fear of death arguably make younger generations more likely to trade freedoms for protection from health threats, even if this protection is simply perceived and not truly engendering better health.

DISCUSSION

Preventing paediatric influenza deaths showcases the difficulty of striking a proper balance in the values that public health policies promote. If promoting health is sought primarily by reducing all risks to disease and death, this comes at a cost to other values like education, friendship, autonomy, productivity and so forth. Rather than aiming for public health policies, which try to avoid all risks to health and focus on health outcomes alone, we should consider the effects of these measures on a range of other values.

The values we currently regard as important have been shaped by the pandemic. Health has risen in status and has arguably become the lens through which many see the world. It is insufficient to use health outcomes alone as the metric for public health policies because what makes life worth living as humans extends beyond simply reducing death and disease. The ideal is not a subjection and subduing of all values under health, but a true harmony of values that adapts to the context applied.

Given the high cost of school closures on education, mental well-being, socialisation and more, preventing the influenza does not justify these measures. Mask wearing seems an appropriate

measure to adopt in aims of controlling transmission, but it comes with notable shortcomings. It does not provide immune protection, can give a false sense of protection from disease and may make the population increasingly vulnerable to respiratory diseases. On the other hand, vaccination helps prevent severe influenza infections both in paediatric and adult populations, while building immunity.

For those who consider the downsides of wearing masks, the conclusion may be that we should not continue masking to prevent future paediatric influenza deaths. On the other hand, cultural change to embrace an infection prevention measure like masking could save countless lives each year, including hundreds of children in the USA. Despite this reality, the adverse effects of mask wearing on non-verbal social communication, emotional connectivity and susceptibility to disease make it an unfavourable long-term practice beyond an emergency measure in a pandemic.

Rather, the discussion should shift to promoting more efficacious and less liberty restricting measures like vaccination. Because vaccination is already a safe and efficacious measure at preventing the influenza, it seems questionable to add mask wearing as an additional measure to prevent influenza's spread. Instead, efforts could be focused on increasing vaccination rates.

Masking remains advised given the continual COVID-19 spread and lagging vaccination rates. On 29 October 2021, the FDA approved the Pfizer-BioNTech vaccine for children ages 5–11.²⁴ Despite this new intervention, vaccination hesitancy remains high among some adults, who are unlikely to vaccinate their children. Balancing the costs and benefits of pandemic measures, along with broader consideration of their effects beyond mitigating viral transmission, will drive public health discussions further as we emerge from the COVID-19 pandemic.

Contributors DP is the sole guarantor of this work, and author responsible for the planning, conceptualising and writing of the research reported in this manuscript.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not applicable.

Ethics approval This study does not involve human participants.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data sharing is not applicable as no novel datasets were generated through this work. All data analysed and relevant to the research are included in the article and available in public, open access repositories.

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