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EDITORIAL

Systematic influenza vaccination in the pediatric population

Vacunación antigripal sistemática en población pediátrica

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The official lifespan immunization schedule of the Autonomous Community of Galicia (Spain) was recently published, and includes vaccination against influenza in children aged 6–59 months. Although several neighbouring countries have already expanded vaccination against influenza to include this age group (United Kingdom, Austria, Italy, etc.), Galicia is pioneering this initiative in Spain.

On the other hand, at the national level, the recommendation that still persists today is vaccination against influenza in children who, due to the presence of certain risk factors, are more vulnerable to severe disease or complications of influenza. However, a growing number of autonomous communities, following the recommendations of international agencies such as the World Health Organization or the European Centre for Disease Prevention and Control as well as domestic experts such as the Advisory Committee on Vaccines of the Asociación Española de Pediatría (Spanish Association of Pediatrics), is advocating for routine vaccination in this population.

The aim of vaccination against influenza is to reduce the morbidity and mortality associated with this disease and its impact on the community. And, in this sense, it is important to reflect on the need to vaccinate the population of healthy children.

Influenza continues to be an underestimated disease in the paediatric population in terms of both its incidence and its severity. Whatever these perceptions may be, the scientific evidence shows a different reality.

On one hand, at the global level, influenza affects 90 million children aged less than 5 years annually, causing 10 million cases of pneumonia (1 million of which are severe) and resulting in the death of 28 000–111 500 children in this age group.[1]

In Spain, the influenza surveillance report for the 2021–2022 season published by the National Centre of Epidemiology shows, as it did in previous seasons, that the incidence of influenza peaks in the 0-to-4 years age group (1521.4 cases per 100000 children under 5 years), followed by the 5-to-14 years age group.[2]

Thus, influenza is not a banal disease in childhood, and, although it is usually self-limiting, it can cause complications such as pneumonia, acute otitis media or even severe diseases such as encephalitis or myocarditis that may be fatal. In fact, it is estimated that pneumonia, one of the most frequent complications of influenza, has a fatality rate of 0.14% to 0.45% in children aged less than 5 years.[3] Although the risk of severe disease or death is higher in children with comorbidities, 50% of the children who die of influenza do not have any risk factors.[4]

On the other hand, in addition to the unquestionable benefits of paediatric vaccination at the level of the individual, it is also expected to be beneficial as a public health strategy

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at the community level. And, at this level, it is important to take into account the impact of influenza not only on the health care system, but also on society.

In the health care field, the direct impact of influenza on the available resources is obvious. In the paediatric population, influenza is often subclinical or presents with nonspecific manifestations that make it difficult to distinguish it from other acute respiratory infections, which may lead to multiple visits to paediatric care services (1.7–2.8 visits per case), in addition to prescription of antibiotics (in 7%–55% of confirmed cases), antipyretics or other drugs for symptomatic treatment (in 76%–99% of confirmed cases), which in many cases are unnecessary. Furthermore, the associated hospitalization rate can be as high as 20% of confirmed cases, with the mean length of stay ranging from 1.8 to 7.9 days.[5]

As regards the impact on society, influenza in the paediatric age group indirectly places a significant burden due to school absenteeism, resulting in an estimated 2.8–12 days of missed school.[5] This inevitably impacts parents both at home and at work, as they often need to miss work for 1.3–6 days[5] to care for their children at home.

In addition to the different aspects of the burden of disease of influenza in children discussed this far, it is also important to consider another factor: the impact on the adult population of paediatric infections.

Analysing the data of the influenza surveillance report for the 2021–2022 season published by the National Centre of Epidemiology,[2] we found that, consistent with previous seasons, the increase in incidence in the paediatric population predated the increase in incidence in the adult population. This phenomenon suggests that children are serving as influenza transmission vectors in the household and the larger community, including high-risk groups. This hypothesis is based on different factors, such as the limited immunity of children, the higher titres of virus shed by children, with longer shedding periods compared to adults, closer physical contact with other household members and poorer adherence to effective hygiene measures (hand and respiratory hygiene).

To address all these issues, there are several safe, efficacious and effective tools at our disposal. However, it is also true, as demonstrated by the COVID-19 pandemic, that nonpharmacological hygiene measures (hand hygiene, use of masks, social distancing etc.) are essential in infection prevention and control. However, as was also the case in the pandemic, vaccination is the measure that has proven most effective at preventing influenza and its complications, as shown in the study by Escandell-Rico et al[6] published in the current issue of ANALES DE PEDIATRÍA. However, despite the scientific evidence on the efficacy and safety of vaccination against influenza, it continues to be a sporadic practice in children, even within risk groups. This was also the conclusion reached by the authors of another study published in the current issue of ANALES DE PEDIATRÍA, Díaz-García et al.[7]

We believe that both studies will encourage a reflection on the vaccination strategy that should be implemented to remedy or at least minimise the potential risks of influenza in the paediatric population.

The experience gained in the management of the COVID-19 pandemic should also be applied when it comes to implementing a strategy for vaccination against influenza. Thus, it is important to take into account the epidemiological changes in the circulation and transmission of influenza virus brought on by the pandemic, in addition to the coexistence of both viruses.

In our opinion, we need to change the perception that influenza is a mild disease in the paediatric population and that the associated costs and impact on society are negligible. Awareness must also be raised among health care professionals of the importance of this disease in childhood, in addition to promoting public health strategies promoting vaccination of the paediatric population, independently of the presence or absence of risk factors.

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