


Educational Alternation: A challenge to protect the health and life of the school community

EDITORIAL

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The unexpected arrival of the pandemic brought everyone to face drastic changes in the way people used to live in normal times, forcing them to experience different types of home confinement. These resulted in the closure of almost all sectors and, consequently, the disruption of many essential services, such as educational interventions. Many of these interventions were aimed, apart from education itself, at providing protection to schoolchildren, detecting risk conditions of domestic violence, child abuse and child labor, providing school meals, monitoring compliance with immunization programs and preventing school dropout, among others.

Although schoolchildren are not the group most affected by COVID-19, a recent UNICEF study conducted in 87 countries found that in November 2020, children and adolescents accounted for 11% of reported COVID-19 infections¹, while in Colombia the number of pediatric COVID-19 cases (patients aged < 18 years) is estimated at 7-8% representing 0.025% of deaths².

While the risk of infection in schoolchildren has been reported to be lower than that of teaching and administrative staff in schools, this difference may be overestimated due to a lower probability of detection considering the predominantly asymptomatic course of infection in children. However, COVID-19 can be a severe disease in young people, contributing not only to the number of admissions to intensive care units but also to the number of deaths³.

As for COVID-19 transmission, a study conducted with children showed that it occurs more frequently in the home environment, which is directly related to the stage of disease of the index case (that is, compared to asymptomatic cases, those in the pre-

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symptomatic stage were responsible for twice as many secondary cases as index case (1/3 versus 1/6)⁴. This means that infected children are an important source of infection for their peers, suggesting greater transmission rates in high school compared to elementary school⁵, as well as in teachers and school administrative staff. The latter would in turn lead to new cases of infection in the school community and, given their greater mobility, also in the general population⁶.

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The importance of socialization in teaching-learning processes and the psychological development of children, adolescents and young people is widely recognized. Furthermore, the positive impacts that educational activities have on physical and mental health and more generally, the chances that our children will reach their full potential and have a fulfilling life are well-known. In this regard, and in response to the current situation, the education sector needed to implement new strategies, switching to online education (assisted by information and communications technology (ICT)) and different models of educational alternation.

Educational alternation can be offered in different modes such as hybrid learning, in which a group of students has in-person classes and the rest of the group receive online instruction in a synchronous way, providing options for participation in both spaces. Another strategy combines in-person instruction and asynchronous online activities at home, i.e., a group of students will have in-person and remote instruction and another one will only have in-person instruction. Schools that do not implement any educational alternation model will continue with their educational online offer. Every alternation model implemented by schools entails face-to-face instruction and, therefore, the need to take actions for risk reduction, identification of symptomatic and asymptomatic cases, contact tracing, subsequent follow up and self-isolation, when required.

No one denies the importance of returning to school. However, this should be safely done to protect the health and life of students, teachers, school administrative and support staff and their families. To this end, each school is required to adhere to and adapt biosafety protocols issued by the ministries of education and health. In addition, the current epidemiological situation of each municipality or urban area as well as the course of the outbreak in the local population and school community need to be taken into account. A complete understanding of the local and institutional epidemiological situation is crucial to make responsible decisions when reopening or closing schools to protect the health, wellbeing and life of the school community.

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The following aspects are essential to consider when making these decisions:

- Transmission and speed rates of SARS-CoV-2 infection in the local population and their impact on the educational environment.
- Health care services capacity, especially in Health Promotion Agencies (EPSs in Spanish), to detect and isolate symptomatic and asymptomatic cases; detect outbreaks or clusters of

- COVID-19 cases; identify and trace contacts and implement epidemiological fences to stop disease transmission within the school community.
- The degree to which coronavirus infection and disease in students, teachers and other school staff's relatives can become a risk factor for children and vice versa.
 - Considering transmission dynamics of COVID-19, biosafety protocols alone do not ensure risk reduction unless supported by strict compliance, school preparation to ensure safe environments and technical, ongoing and accurate analysis of the pandemic situation in the local territory.
 - Proper ventilation and air circulation of school areas, especially indoors, is a key factor in reducing virus transmission. Therefore, it is a key issue to consider in school preparation.
 - The decision to reopen a school should be preceded by joint efforts among students, parents, teachers, school board and healthcare personnel to define the basic guidelines for decision making and management actions on healthcare issues, protection of students, staff and their families, as well as coordination with healthcare agencies and anticipation of potential challenges that may arise from school reopening.
 - Supported by the healthcare sector, schools need to define the indicators that will help them decide when the school should be closed, either partially or totally, given the existence of cases in one bubble (stable coexistence groups) or several bubbles.
 - In addition to risk and transmission reduction, aspects such as access to distance learning to all schoolchildren from remote, rural, marginalized, low-income, disabled populations and those having relatives at higher risk for COVID-19 should be considered in school reopenings.
 - Teaching mechanisms should be in place to overcome any gap that schoolchildren may have fallen into due to difficulties in accessing online learning.
 - Implementation of health and nutrition assistance for children, in addition to health care services for girls and adolescents to prevent pregnancy, harassment and sexual abuse.

Faced with the rapidly changing situation of the pandemic, it is necessary to make decisions on school reopening in the midst of great uncertainty. Although there are many challenges that the education sector needs to overcome, during planning and decision making "the response should serve as a catalyst to improve learning outcomes, increase equitable access to education and strengthen the protection, health and safety of children"¹ as stated by UNICEF. Consequently, while the return to in-person education is a priority, especially for basic education, the principle of protection and wellbeing of children and ethical principles should take precedence over any political or economic interest, the exercise of authority or a false sense of security.

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