



## Boletín Médico del Hospital Infantil de México (English Edition)

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### EDITORIAL

## Quality care indicators in primary health care from the perspective of respiratory health: current and future changes

### Indicadores de calidad en atención primaria de salud desde la perspectiva de la salud respiratoria: desafíos actuales y más allá

It has been very gratifying to read and have the opportunity to publish an editorial of the work “Quality of care in children with upper respiratory tract infections in the Mexican family clinics” by Doubova et al. published in the recent edition of *Boletín Médico Hospital Infantil de México* (BM-HIM)<sup>1</sup>.

In Latin America, primary health care (PHC) plays a fundamental role in the network of public health care as an entry point for ~75% of the population. As in Mexico, the population statistics in Chile point out that 60% of morbidity in pediatric care in PHC is due to respiratory causes, half correspond to acute respiratory infections (ARI) and exacerbation of chronic respiratory conditions such as asthma and recurrent wheezing episodes in infants and pre-school children<sup>2</sup>. This has led to the creation of programs specialized in follow-up and detection of these diseases in Chile in conjunction with the secondary network (ARI Program)<sup>2</sup>. The efforts and challenges that PHC must overcome to achieve health outcomes associated with safe, effective and efficient care acquires a particular nuance in Latin America in relation to structural defects and processes in constant change. This is why the contributions of the study of the quality of care for the most common morbidities that challenge the PHC allow the generation of important opportunities for improvement that can impact the quality of life associated with the health of the population as well as from the perspective of the payers and the savings of public and private health systems.

In the study by Doubova et al. the importance of electronic records or clinical files as the primary sources of reli-

able and reproducible information are able to be specified to simply raise quality of care indicators able to be measured and, therefore, followed in time after the intervention policies<sup>1</sup>. The indicators and methods selected appear to be very appropriate for this study<sup>3</sup>—gathered from key recommendations of actual evidence based medicine, appropriately modeled for the particular scenarios that must accept the decisions of the health administration.

In this sense, reading of positive indicators (such as education regarding the warning signs of respiratory distress or the appropriate medication) and negative indicators (mainly the unjustified use of antibiotic therapy) constructs an appropriate matrix for the global analysis of adherence to good clinical practice.

Follow-up is likely conducive to reduce medical error, reduce the ecological risk of indiscriminate use of antibiotics and avoid immuno-rheumatic and suppurative complications of untreated streptococcal infections. For the Latin American reality, with paradigms in the medical culture on which more work is still required, the fulfillment of quality care indicators in upper respiratory tract infections of ~50% is expected. It expresses the importance and the opportunity of working with protocols supportive of continuous education of healthcare providers, not only with the professional physicians, but also educating the population, decreasing self-medication and reinforcing trust and adherence to medical indications. In this manner, by improving the knowledge and compliance with the best clinical practices available in PHC, the project that marked the specific objective of the authors is encompassed.

As mentioned in this article, there are different documents referred to as to how to confront the high prevalence of ARI in adults and children. As Doubova et al. mention, these documents must be modulated for the construction of more or relevant aspects of the assistance that is valued such as effectiveness, efficiency and accessibility, among others.

In this sense, two observations appear to be appropriate for comment. The first is the realization of laboratory tests in support of the diagnosis of infections due to *Streptococcus pyogenes* with the rapid immunoassay antigen or culture. This has been recommended in recently published clinical guidelines.<sup>4</sup> It does not appear to be necessary in the target age group if there are clinical protocols in existence that allow reasonable protection from the risk of unjustified treatment with antibiotics for etiologies that are fundamentally viral in nature. Without a doubt, even when the diagnostic methods of rapid immunofluorescence or immunochromatography—and recently by molecular biology—allow for the identification of the virus involved, the associated costs do not change the indication for symptomatic treatment at the first level of care of the clinical event that involves PHC.

As a second point, the bias of the indication for treatment with acetaminophen for those patients without risk of asthma is not necessarily a widespread practice, and its technical justification requires caution<sup>5</sup>. It is possible to suppose that its inclusion as a quality indicator requires analysis and explanation of the impact being sought. Designs that show an increased risk of acute asthma in children medicated with acetaminophen for viral infections are suggestive of a causality difficult to assign<sup>5</sup> and where phenomena linked to the adaptive and innate immune response, particularly to the risk of viruses spreading to the respiratory epithelium (such as rhinovirus) and its modulation by vitamin D<sup>6</sup> deficiency, are topics to be addressed in the future.

Finally, it is possible that, from the PHC, once the high consultation rate for acute respiratory morbidity is overcome and the importance that education and research is demonstrated, we are able to explore other clinical entities that seek new indicators for education and research and for new quality indicators for respiratory health.

One may speculate that consultation for habitual snoring at the time of PHC opens the opportunity and accessibility for the active pursuit of the symptomatology of respiratory sleep disorders (RSD) in children <5 years of age, given its high frequency (~10% of the pediatric population) and a variable spectrum of severity and due to the high range of multisystemic repercussions that can be triggered<sup>8</sup> including neurocognitive and behavioral consequences<sup>9-12</sup>.

In an ongoing study of PHC in Santiago de Chile in pre-school children, there is a high percentage (~50%) of snoring, which is similar in the group of children with and without psychomotor developmental disorders, both groups having high rates of obesity (30%). Although a strong association with psychomotor development disorders has not been demonstrated, the high prevalence of RSD necessitates its search in each health control center and even more so when there is a high risk in those school children with tonsillar hypertrophy, a condition easily diagnosed during physical examination in the PHC, which is also associated with a higher frequency of acute upper respiratory tract infections.

In conclusion, PHC provides a great opportunity to conduct a full assessment of patients and to educate their families. It is desirable to record everything that is done in the clinical files and build quality of care in respiratory morbidity indicators because, directly and indirectly, they have an impact on health care costs and affect the quality of life related to health in the scenario of frequent illnesses and other less obvious diseases.

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