International Journal of Medical and Surgical Sciences

EDITORIAL

Practice, research, evidence, policy, and practice again. The salbutamol case.

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The Global Initiative for Asthma *(GINA)* periodically delivers one of the most respected guidelines for the medical practice, in this case, for asthma management. *"The Global Initiative for Asthma (GINA) was established by the World Health Organization and the National Heart Lung and Blood Institute in 1993, to increase awareness about asthma among health professionals, public health authorities and the community, and to improve asthma prevention and management through a coordinated worldwide effort. GINA prepares scientific reports on asthma, encourages dissemination and implementation of the recommendations, and promotes international collaboration on asthma research. GINA does not accept donations. The work of GINA is supported only by the sale and licensing of GINA reports and its other publications, and by the voluntary work of GINA committee members" (Reddel et al., 2019).*

Recently, GINA published new recommendations, introducing the biggest change in asthma management in 30 years. These recommendations are based on a research program starting on 2007, which provides a large corpus of evidence about the risks and consequences of the long-standing use of short-acting β2-agonists *(SABA)* alone as the first step of asthma treatment. In Chile, SABA alone means salbutamol. GINA states that *"For safety, GINA no longer recommends treatment of asthma in adolescents and adults with SABA alone. Instead, to reduce their risk of serious exacerbations, all adults and adolescents with asthma should receive either symptom-driven (in mild asthma) or daily inhaled corticosteroid (ICS)-containing treatment" (Reddel et al., 2019).*

However, evidence against the use of SABA alone as the first step of asthma treatment has been published for almost four decades already. So, why did GINA introduce these changes in 2019? As GINA explained, in 2007 they started a program to assess the problems related to the use of SABA alone as the first step of asthma treatment *(Reddel et al., 2019)*. In other words, they considered the best available evidence on 2007, but they did not introduce changes on that matter until they got appropriate or strong evidence to support those changes. Nevertheless, that decision took twelve years, and many millions of people did not get any benefit from scientific evidence on asthma. But that is a simplistic view on this matter.

There is a cycle going from current practice to a new practice. You do something in a particular way and then you assess it with a research project, this gives you scientific evidence; that evidence is informed to policy makers, and finally, policy makers generate guidelines, in order to deliver the best medical practice. So, evidence seems to be a central part of the process, but that is a simplistic view as well. In fact, in the real world, these four stages are *(unfortunately)* disconnected. In many cases, science and practice are separated worlds. Clinicians deliver medical care based on traditions, not evidence. Scientists develop research motivated by academia pressure, not for practical problems. Yet this situation is improving by evidence-based medicine, the new practice-based research networks *(PBRN)*, and local or global initiatives, such as GINA.

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Conflict of interests: None.

Acknowledgements: None.

doi: 10.32457/ijmss.2019.011.

Despite the above mentioned, as shown in the salbutamol case, a long-time gap persists between evidence and the policy, and so on with the practice. This means that, on many occasions, medical care is outdated. How to fix this problem? It is hard to answer. Research is a relatively slow process, which means that there is not much space to improve the evidence-policy gap. However, the policy-practice gap could be shortened by active campaigns to deliver evidence-policy to medical practitioners, and by making research on the process, in order to get a better comprehension about medical practice. This is a duty for all the stakeholders in medicine, from scientists, to policy makers and medical practitioners.

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