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## **Key potentially inappropriate drugs in pediatrics: The kids list**

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# Key Potentially Inappropriate Drugs in Pediatrics: The KIDs List

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In this issue of the *Journal* Meyers et al<sup>1</sup> have published the KIDs List, the first-ever list of drugs that are potentially inappropriate for use in pediatrics. The authors are to be congratulated for their considerable effort in acquiring, reviewing, and finally incorporating the evidence to produce this list. For far too long such a document has been merely a concept in the minds of many pediatric practitioners. The concept has now become reality.

Despite the many large and active children's hospitals across North America, the reality of child health care is that most children are cared for in settings in which adult and pediatric care are mixed. Many of the medications dispensed to children are prescribed by non-pediatricians and in settings where information resources for pediatric drug information may be quite limited.<sup>2</sup> While efficacy is commonly considered in therapeutic decision making, in many cases safety is not considered to the same extent. This is especially germane when drugs that are commonly used in adults may cause problems in children, notably in infants. The portrayal of the child as a "Therapeutic Orphan," coined by Shirkey over 50 years ago, remains despite many efforts to relegate it to history.<sup>3</sup> It can only be hoped that the availability of the KIDs List will help to erase that picture.

How can the KIDs List begin to do this? The first and most obvious way is to serve as a guidance document, both for prescribers as well as for pharmacists, who monitor patients and provide therapeutic advice for clinicians. Another way in which the list will be useful is that its publication helps us to identify specific areas in which research and further study are needed, not only with regard to medications per se but also more broadly. This list is prepared for drugs that are available in the United States specifically. Certainly, it will be useful in other areas of the world, but medications that are used in children only in other areas of the world also need to undergo similar scrutiny. Ideally this list will stimulate professional associations, research funders, and federal regulators to support clinical research that will provide more information to help guide practitioners.

There are limitations to the KIDs List, which are clearly addressed by the authors. A lack of robust evidence is,

and has been, the major stumbling block of any pediatric medication initiative such as the development of the KIDs List. This is complicated by the fact that 50% of the drugs that are used in pediatrics in the United States are utilized in an 'off-label' fashion. Given the paucity of solid evidence for most drugs, the authors clearly explain their rationale for the various categories that they have chosen. They stress that this is a guidance document, "meant to serve as a clinical tool and is not meant to replace clinical judgment or to be used in a punitive manner."<sup>1</sup>

Another limitation is that this list is limited to drugs available on the US market. Issues may arise with the inclusion on the KIDs List of some drugs that are on the World Health Organization's Model List of Essential Medicines in Children.<sup>4</sup> This could be problematic for areas of the world in which some of the therapeutic alternatives used in the United States may not be available.

It will be interesting to see if the KIDs List results in any potential legal and regulatory issues (including reimbursement) in the United States or elsewhere. The potential impact on the utilization of the drugs on this list is an area that should be closely followed. The list may affect formulary lists for hospitals and other organizations. A KIDs List application that works in conjunction with other types of clinical monitoring (e.g., drug interactions, pharmacogenomics, clinical features) would be an interesting future direction.

We salute the Pediatric Pharmacy Association for supporting, and the authors for putting together, this inaugural version of the KIDs List. The KIDs List is a call for organizations such as the Pediatric Pharmacy Association and the American Academy of Pediatrics to take leadership roles in moving the needed research forward and in developing collaborative working relationships with colleagues in the rest of the world.

The KIDs List is not perfect, a fact acknowledged by the authors. However, it is a very important document in that it takes the first steps in a new direction to enhance drug safety for children and to provide guidance to clinicians and direction and inspiration to our next generation of pediatric pharmacy and drug therapy researchers.

## ARTICLE INFORMATION

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