

## USE OF HERBAL PRODUCTS IN CHILDREN: RISKS AND BENEFITS

Stefano Loizzo<sup>1,2</sup>, AnnaLivia Loizzo<sup>3</sup>, Anna Capasso<sup>4</sup>, Alberto Loizzo<sup>1</sup>

<sup>1</sup>Dept of Drug Research and Evaluation and <sup>2</sup>Dept of Cell Biology and Neurosciences, Istituto Superiore di Sanita', Roma, Italy;

<sup>3</sup>Dept of Paediatric Neuropsychiatry, University of Roma Tor Vergata, Roma, Italy,

<sup>4</sup>Dept of Pharmacology, University of Salerno, Salerno, Italy

More and more parents are considering the use of herbal remedies to maintain their children's good health and to treat their diseases. Therefore, an approach from a clinical pharmacological point of view should be considered for the evaluation of risk to benefit balance in the use of herbal products versus conventional drugs for the treatment of various conditions in children. Conventional drugs on the market must receive authorisation from health Authorities following fulfillment of a series of preclinical and clinical trials, through which a favourable balance between efficacy and safety of the drug is demonstrated according to the actual scientific knowledge. In the last few years, in several countries for new drugs great effort was forwarded to extend these specific rules to be applied to developing organisms and to paediatric patients as well. In general, herbal remedies are not obliged to follow the same rules as conventional drugs do, and no testing of safety or efficacy for herbal products are required, few restrictions on product claims or controls on product purity or ingredients, and no post-marketing surveillance are required. Therefore, an evaluation on the balance between risk and benefit for herbal products in children is seldom possible. The use of herbals in the "familial" therapy is part of tradition, and is somehow accepted with some caveats, but the use of herbals for the therapy of severe conditions in children requires different and more specific considerations. The popularity of complementary and alternative medicine is growing at a remarkable and perhaps disquieting speed. "Official" medicine emanates signs of alarming bewilderment, and enforces studies on the "logical" side of a common ground. For example, in the case of herbal therapies, effort is directed towards studies which might clarify benefits (therefore encouraging controlled clinical trials to be performed on the line of those accepted for conventional drugs) and risks (through enforcement of laboratory studies, and pharmacovigilance). Moreover, increased knowledge of such risks and benefits deriving from herbals is encouraged in the consumers. This concept is synthesized through the assumption: no benefits without risks. However, much work is still needed in this line. The high prevalence of complementary and alternative medicines warrants further studies to better understand the reasons and consequences of complementary and alternative medicines use particularly on quality of life, also since increasing popularity of complementary and alternative medicines may arise from less "trust" of the the consumers versus official medicine, or perhaps from a sensation of "distance" between official medicine and the spiritual needs and fears of the patient. If this assumption is true for adults, may be even more important for children.