



EDITORIAL

Theory and practice – The need for converging

Teoria e prática – a necessidade de convergir

Jorge Amil Dias

Paediatric Gastroenterology, Department of Paediatrics, Centro Hospitalar S. João, Porto, Portugal

Received 27 August 2014; accepted 31 August 2014



There is wide evidence that a considerable number of diseases may derive from very early events in life and great efforts have been put into research and awareness of health agencies with the aim to promote good health.¹

Intensive research has been put into identification of ideal patterns of infant feeding and the accepted end-points go well beyond visible or measurable consequences in the short term.^{2,3} Besides the long-term effects there are also issues like food allergy or food-related malabsorption that may be prevented or delayed by food practices. The recommendations derived from carefully controlled studies sometimes go against apparent “common sense” practices. There is considerable evidence that delaying exposure to specific foods in children at family risk of allergy may actually increase the risk rather than reducing it.^{4,5} A wonderful example of this apparent contradiction was reported by Du Toit showing that in similar genetic populations the early consumption of peanuts reduced the incidence of allergy as opposed to a later introduction of this food into the diet.⁶ A similar situation may be coeliac disease in which delaying the introduction of gluten may increase the risk rather protecting from it. A large prospective study is under way in order to answer the question of the best timing for introduction of gluten (www.preventcd.com) and results will be disclosed soon. As the literature on the best practices in infant feeding is very large and sometimes contradictory, comprehensive reviews and guidelines based on evidence and testimony of experts are a precious resource to adjust everyday practice. The European Society for Pediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) has issued a number of publications on this issue. A document

on complementary feeding was published in 2008 reflecting the available evidence.⁷

In this issue of GE, Nóbrega et al. publish a survey of common practices in infant feeding in a Health center that serves populations of different ethnic origins. The authors conclude that there are a considerable number of inconsistencies in the identified practices in relation to the current recommendations, and this non-compliance is even higher in populations of immigrants. The study has a number of shortcomings as acknowledged by the authors which may hamper the identification of the true source for these malpractices. Although the various identified “errors” practiced by families may have different levels of risk for the health of the children, it is worth reflecting on the factors revealed by the manuscript. The size of the sample and method cannot provide accurate relevance of the ethnicity factor in complying with the instructions from health professionals. Probably the cultural background and economic status of each family may have a significant weight in matching what is desirable and what is pragmatic. The presence of an elderly member involved in the care of the children like grandparents may outweigh the medical instructions with the belief that personal experience provides the best rule.

On the other hand health professionals also tend to be resilient to changes in old practices just because they have not seen direct consequences of their accumulated experience. Quite often “personal experience” is not more than repetition of the same mistakes with more and more confidence, deliberately ignoring the accumulated evidence on the matters. This type of behavior is quite disseminated. A good example is provided by recent facts on the best treatment of children for gastroesophageal reflux disease (GERD) and overuse of proton-pump inhibitors (PPI's): ESPGHAN and its American counterpart (NASPGHAN) published

E-mail address: jamildias@zonmail.pt

evidence-based guidelines for the diagnosis and treatment of GERD in children.⁸ Five years later surveys were made among pediatricians to evaluate compliance with those rules. The result was quite disappointing with excessive rate of prescription of PPI's.⁹ Similar result was found in various other countries in Europe.¹⁰ The same research group decided then to assess whether a training program would change that scenery. The result was quite interesting showing that educational tools that are simple to implement can cause a considerable change in the results.¹¹ This example of another disease can certainly be applied to the recommendations on infant feeding. Educating the educators is undoubtedly the way forward for continuous update of health professionals about recent advances in knowledge.

In a time of disseminated access to information and transnational scientific societies it is doubtful that the lack of national guidelines should play a relevant role in the lack of compliance with the best practices. The urge for national rules will only duplicate what is already available from reliable sources and solid methods of analysis of the literature.

The work of Nóbrega and collaborators draw the attention to the discrepancy between published guidelines and the end result at the point of care for children. Local strategies may be needed in specific areas where cultural standards may cause much resistance or continuation of risky practices that jeopardize the health of children. But this work also highlights that efficient action is needed to update the health professionals in relation to the *legis artis* in infant nutrition.

Conflicts of interest

The authors have no conflicts of interest to declare.

References

1. Koletzko B, Kolacek S, Phillips A, Troncone R, Vandenplas Y, Baumann U, et al. Research and the promotion of child health: a position paper of the European Society for Pediatric Gastroenterology, Hepatology, and Nutrition. *J Pediatr Gastroenterol Nutr.* 2014;59(2):274–8.
2. Vaiserman AM. Early-life nutritional programming of longevity. *J Dev Orig Health Dis.* 2014;1–14.
3. Vickers MH. Early life nutrition, epigenetics and programming of later life disease. *Nutrients.* 2014;6(6):2165–78.
4. Zutavern A, Brockow I, Schaaf B, Bolte G, von Berg A, Diez U, et al. Timing of solid food introduction in relation to atopic dermatitis and atopic sensitization: results from a prospective birth cohort study. *Pediatrics.* 2006;117(2):401–11.
5. Koplin JJ, Osborne NJ, Wake M, Martin PE, Gurrin LC, Robinson MN, et al. Can early introduction of egg prevent egg allergy in infants? A population-based study. *J Allergy Clin Immunol.* 2010;126(4):807–13.
6. Du TG, Katz Y, Sasieni P, Mesher D, Maleki SJ, Fisher HR, et al. Early consumption of peanuts in infancy is associated with a low prevalence of peanut allergy. *J Allergy Clin Immunol.* 2008;122(5):984–91.
7. Agostoni C, Decsi T, Fewtrell M, Goulet O, Kolacek S, Koletzko B, et al. Complementary feeding: a commentary by the ESPGHAN Committee on Nutrition. *J Pediatr Gastroenterol Nutr.* 2008;46(1):99–110.
8. Vandenplas Y, Rudolph CD, Di Lorenzo C, Hassall E, Liptak G, Mazur L, et al. Pediatric gastroesophageal reflux clinical practice guidelines: joint recommendations of the North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition (NASPGHAN) and the European Society for Pediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN). *J Pediatr Gastroenterol Nutr.* 2009;49(4):498–547.
9. Quitadamo P, Miele E, Alongi A, Brunese FP, Di Cosimo ME, Ferrara D, et al. Italian survey on general pediatricians' approach to children with gastroesophageal reflux symptoms. *Eur J Pediatr.* 2014.
10. Quitadamo P, Urbonas V, Papadopoulou A, Roman E, Pavkov DJ, Orel R, et al. Do pediatricians apply the 2009 NASPGHAN-ESPGHAN guidelines for the diagnosis and management of gastroesophageal reflux after being trained? *J Pediatr Gastroenterol Nutr.* 2014;59(3):356–9.
11. Quitadamo P, Papadopoulou A, Wenzl T, Urbonas V, Kneepkens CM, Roman E, et al. European pediatricians' approach to children with GER symptoms: survey of the implementation of 2009 NASPGHAN-ESPGHAN guidelines. *J Pediatr Gastroenterol Nutr.* 2014;58(4):505–9.