

EDITORIAL

Invitation for controversy



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“Controversy is only dreaded by the advocates of error”
Benjamin Rush

“I have enough trouble closing a patent ductus, without creating one,” remarked Dr. Robert Gross, a world-renowned surgeon who was the first to successfully close a patent ductus arteriosus (PDA). While remarkable in his own right, his response to Dr. Helen Taussig leads her to Drs. Alfred Blalock and Vivian Thomas in her pursuit of a surgical solution for her “blue babies.”¹ Clearly, Dr. Gross was not afraid to tackle controversial surgeries, reportedly performing the first PDA closure as a surgical resident and purposely waiting until Dr. William Ladd, Chief of Surgery at Boston Children’s Hospital who opposed the surgical approach, left for summer vacation.² To his own credit, Dr. Ladd was the first to demonstrate that surgical correction of intussusception was advantageous to enemas and should be pursued without delay.³ Appropriately, we use the term pioneer to describe such persons because they are the first to propose an alternative to the standard approach, and while history celebrates their accomplishments, each must first confront the controversy that arises from going against the tide. But even the pioneers may hesitate to tackle the next frontier.

But what must we admit if we hope to confront long-held practices? Initially, an alternative approach has to be considered reasonable and viable. While many of these “alternatives” are discarded when new evidence supports and strengthens the standard practice, the real test is born out of an alternative approach that may be superior or even contrary to our customs and practices. Some obvious questions ensue, such as “Should we adapt and incorporate this new evidence into our individual and corporate practice?” or “What are the factors that influence whether and how we shift practices?” A harder question to answer may be “Have we really been doing it wrong all this time?” Here, controversy lives and thrives and examples of such controversies are easy to identify.

In her outstanding book *Early: An Intimate History of Premature Birth and What it Teaches Us About Being Human*, Sarah DiGregorio retells a story by the late Maria Delivoria-Papadopoulos where she waited until a preterm infant with respiratory distress syndrome was pronounced dead before intubating and providing mechanical ventilation with a modified Bird Mark 8. “I put them on a machine and they revived for an hour. They revived after being pronounced dead” said Dr. Delivoria-Papadopoulos.⁴ From pediatric organ transplantation to hormone therapy for adolescents with gender dysphoria, new ideas and evidence can be met with skepticism or opposition.^{5,6} But some new ideas deserve skepticism until overwhelming evidence clarifies the position as is

the case with the false association between childhood vaccines and autism.⁷

Pediatric Research is committed to evaluating and publishing compelling data that shifts paradigms in pediatric health and disease.⁸ To complement this mission, the editors have created space to explore new and long-standing controversies in *Perspectives*. The new “Controversies” section of *Perspectives* will highlight commentary from experts and recount personal stories of swimming upstream in controversial areas of pediatric health and research. We begin with a simple and long-held belief that water fluoridation is beneficial and safe for children. Beginning in 1945, fluoride levels in municipal water supplies are monitored and supplemented to prevent dental caries. While the practice was widely adopted in the United States over the next several decades, fluoridated water was met with skepticism and safety concerns in many countries. “Is water fluoridation safe?” is a reasonable question. However, when evidence emerges that refutes the long-held belief that practice is both beneficial and safe, how do we respond as a scientific community. In the first of many “Controversies,” Christine Till and Rivka Green describe how the widespread belief in the benefits of fluoride supplementation impeded the release of their groundbreaking work linking fluoride exposure in pregnancy with adverse neurodevelopmental outcomes in offspring.⁹

The editors invite readers of *Pediatric Research* to submit their perspectives on controversial topics in pediatric health and we look forward to supporting open dialog challenging biases and integrating new knowledge with existing beliefs.

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ADDITIONAL INFORMATION

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