The Contribution of Medical Periodicals to the Development of Pediatric Science in Modern Conditions

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For me personally, high technologies in pediatrics are not just new opportunities for solving regular professional problems. If we draw an analogy with the development reproduction of sound on a computer, then we are gradually moving from the perception of information from the motherboard speaker signal, through elementary 8-bit, and 16-bit melodies, then through polyphony to the reproduction of an audible spectrum of sounds and further to the possibility of transmitting analog sound, deep, touching not only the audible range, but also the vibrations felt by the skin, with the goal of revealing a seemingly familiar classical piece in a new way. Likewise, in medicine, we are able to obtain, use, and interpret increasingly complex data, which can give us not only the usual range of information but also new opportunities to sense the patient on a completely new level, perhaps within the framework of his genetic line and in macro- and microecological factors.

Thus, any technical innovation makes us, pediatric surgeons, want to reconsider the routine technique of surgical intervention and feel at our fingertips the changes that we are touching. Laparoscopy, endoscopic navigation, advanced radiation techniques, gamma knife, intraoperative coagulation, robotic assistance, and much more - these innovations, which seem recent to us, have already become firmly established in everyday work, but still harbor an as-yet unconscious version of vibration. We are eagerly looking forward: to what new achievements of technical thought can we apply to move to a new round of the spiral of development of medical science? Computer technology, artificial intelligence, organ printing? I see great potential in any ideas available to us!

I am sure that fellow pediatricians and neonatologists, for their part, also see many pressing problems that medical science has yet to resolve. Here is the growing incidence of autism, curing congenital dyshormonal and dysmetabolic conditions, and overcoming the long-term consequences of prematurity and traumatic birth, including cerebral palsy. All the most valuable things along this path can be discovered and implemented at the interface - with the interpenetration of medicine and other high-tech disciplines: metabolomics, nutrigenomics, molecular biology and genetics, remote technologies, computers, and nanotechnologies.

At the same time, I would not like to present some kind of educational gap. Rather, I would talk about the “fotcamera effect”. Each individual specialty looks at the patient through its own viewfinder and sees only part of the big picture. By combining our efforts in an interdisciplinary approach, we broaden our horizons and find the optimal treatment strategy in each individual case.

We can find examples of such cooperating in fetal surgery and neonatal care, in pediatric oncology, and treatment of inflammatory bowel diseases. When in order to solve difficult problems, we find the right solution at the intersection of all opinions.

It is important not only to find solutions but also to convey advanced scientific discoveries that have proven their effectiveness and safety to routine practice, to make them familiar to every pediatrician in every corner of our planet. In this case, one cannot do without Guidelines and Standards. Such documents, based on big data analysis, evidence-based medicine, and the work of localization authors, allow local specialists not only to learn about high achievements but also to reasonably strive for their implementation in their healthcare facilities and use for the benefit of their patients.

It seems to me that today we are entering a new era, an era when scientific thought is becoming cramped within the framework of specialization or territory. We must break all restrictions, reduce the distance between each other, and enter the space of joint creativity. Now comes the era of interdisciplinary problems, collaboration of
scientists of various specializations, and combining multicenter experience.

Of course, we understand the potential problems and limitations associated with the integration of high-tech disciplines into pediatric science, which is associated with equipping clinics with the necessary devices and specialists, regulating the activities of clinics with documents that can limit the participation of specialists in medical practice, different traditions, and attitudes towards medicine from patients. On the other hand, our contribution is mainly to provide additional tools for practitioners to rely on in finding the right solution.

On the other hand, the modern availability of information creates a certain chaos in medical publications as well. In this regard, the main responsibility for bringing order to this chaos lies with scientific journals and their editorial boards. Collect scattered information, analyze a large amount of data, and provide the reader with the quintessence of new knowledge, see the essence of the problem, and analyze its solution in different scientific teams, all this will provide support for the practicing physician with a conscious and reasoned approach to the treatment of his patients.

In conclusion, I would like to note that the contribution of medical journals lies not so much in providing new medical information, but also in the analysis of this information with the creation of a safe information field. Once in this field, the reader has the opportunity to obtain the necessary tools for solving practical issues and determining the trajectory of professional development.

So, let us also take part in scientific research to the best of our ability - we will contribute to multicenter research, arm ourselves with new capabilities develop alternative approaches and our own methods, and then share our experience and knowledge with colleagues at conferences and in journal publications. They say curiosity reduces the risk of professional burnout. Take care of yourself, and your colleagues, and never stop being interested in new things!