

# Pediatric Practice in Israel 2016: Combining the Art of Medicine and Science

This special issue of the *Israel Medical Association Journal (IMAJ)*, distributed at the annual conference of the Israeli Association of Pediatrics (IAP), 16 November 2016 in Tel Aviv, includes several original and review manuscripts from ambulatory clinics as well as several medical centers across Israel and from different pediatric disciplines. These articles represent some of the broad and continuous scientific work done by members of our association.

Amir et al. [1] review the experience of a tertiary medical center in surgical repair of congenital heart defects and report encouraging results that are quite comparable to those of leading centers in the world. In fact, Israel has been a site for heart surgeries in recent years, not only for local and neighboring countries' children but also for children arriving from developing countries around the world for repair of heart defects through the 'Save a Child's Heart' fund.

Baram et al. [2] examine the risk for occult bacteremia in the era of routine 13 valent pneumococcal vaccination. As expected, there is a prominent decline in the rate of occult bacteremia; however, even during this era the risk for occult bacteremia is not negligible and should still be considered during the evaluation of the febrile infant.

The "new morbidities" in Pediatrics include several metabolic, nutritional, educational and behavioral disorders demanding increasing attention in routine pediatric care. Several articles in this issue reflect the growing interest in this area. Berman and co-authors [3] did not find an association between Legg-Calvé-Perthes disease and attention deficit hyperactivity disorder (ADHD). Cohen et al. [4], who examined the seasonality of methylphenidate prescriptions during the year, demonstrated a decrease in the number of these prescriptions dispensed during the summer months and Passover and call for attention that due to this phenomenon this chronic illness may be not be managed optimally. Leitner et al. [5] investigated the different diagnostic practices of ADHD and found significant differences among three medical specialties with regard to the clinical evaluation of ADHD. This finding is worrying and may reflect insufficient solid criteria for the diagnosis and treatment of this widespread disorder.

Katz and Rothenberg [6] review the trend of current guidelines for the introduction of solid food to the infant diet, calling for earlier introduction in order to prevent future allergies. The mechanism of this alleged protection is not clear and may be related in part to desensitization of actually allergic children.

The authors' review and interesting perspectives provide encouraging data for the prospects of future decrease in the rate of serious and life-threatening food allergy reactions. However, this review should be analyzed and interpreted cautiously. For example, early introduction of eggs was effective in decreasing egg allergy in only some of the studies, and interventional data on the effectiveness of early cow's milk introduction are still lacking. It should also be pointed out that changes in dietary guidelines are not arbitrarily made but are derived from the collection and analysis of scientific data.

One of the goals of the Israeli Association of Pediatrics (IAP) has been to coordinate all the subspecialties and disciplines related to child care, and I am pleased to include in this issue articles from our Pediatric Surgery colleagues. Sweed et al. [7] nicely demonstrated the utility and safety of transcatheter arterial embolization for blunt and penetrating abdominal trauma in children when these procedures are performed cooperatively with surgeons and interventional radiologists. Jawdat and team [8] describe their experience with one-stage laparoscopic orchiopepy in the treatment of intraabdominal testis and report results comparable with those of the more conservative surgical repair. Another example of the expansion of laparoscopy in pediatric surgery is reported by Sukhotnik et al. [9] who successfully used laparoscopic surgery instead of conservative laparotomy for the repair of urachal anomalies. Avinadav and colleagues [10] describe how the addition of "bedside" ultrasound as part of the routine care in a pediatrics department has led to quicker diagnoses and quicker administration of the appropriate treatment.

Two articles deal with management of acute pain in children. The challenges of pain assessment and treatment in the pediatric emergency department are illustrated in a review by Jacob and Shavit [11]. This short review provides an update of the recent literature on acute abdominal pain and appendicitis-related pain in the pediatric emergency department. Rimon et al. [12] examined the effect of medical clowns on biochemical and expressional manifestations of pain in the emergency department. While there was no evidence for decreasing cortisol level in children assisted by clowns, the pain score was significantly lower in the intervention group. This study should encourage more research to define the role of medical clowns in pediatric services.

Neonatology research is represented in this issue by the study of Bin Nun et al. [13] who investigated the role of prophylactic heparinization and propose optimal dosing and a practical clinical aid for the neonatologist.

The abstract session of the annual conference includes high quality clinical studies in various aspects of pediatric emergency medicine. Jacob et al. [14] examined factors associated with the administration of emergency department (ED) analgesia in patients with acute appendicitis and observed a low rate of administration of analgesia, with no ethnic differences. Gelernter et al. [15] assessed the prevalence of significant traumatic brain injury on computerized tomography in infants with head trauma and found no difference in the incidence of significant brain injury between children presenting to the ED less than 24 hours after the injury and children with late presentation. Aronson-Schinasi and team [16] developed and evaluated a simulation-based workshop for pediatrics residents on the disclosure of medical errors and found that through this workshop providers gained experience in error disclosure. Erell et al. [17] reported that although shivering was a common symptom in febrile children presenting to the ED, it was not associated with an increased risk for serious bacterial infection. Allon et al. [18] showed that the pediatric Canadian Triage and Acuity Scale (CTAS) demonstrated good validity in categorizing patients' acuity levels in an Israeli pediatric ED.

The second part of this issue includes original articles and case reports from our colleagues that had been submitted to *IMAJ* prior to the time of call for articles for this special issue. We chose to include these in order to further emphasize the fruitful scientific work done by Israeli pediatricians.

The scientific work presented in this issue of *IMAJ* is conducted in addition to the clinical work and the involvement of Israeli pediatricians through the IAP in child health care issues and national public health measures. Examples from recent years include the direct and prominent involvement of the IAP in the national campaign of wild poliovirus elimination, renewal of water fluoridation administration, regulation of food, and shaping the future of "milk drop" clinics across Israel.

The IAP includes more than 2500 pediatricians. While the number of pediatricians per population in Israel is comparable to several Western countries, the demography in Israel is different and therefore the work load on Israeli pediatricians is quite heavy. For example, the percentage of children < 14 years old in Israel is double that of Germany (28% vs. 14% respectively). The annual fertility rate and population growth rate in Israel are two to three times higher than the average in Europe [19]. In spite of these data, and in spite of a relatively low health expenditure as a percentage of the gross domestic product (GDP), several indices such as neonatal and infant mortality are low and vaccination coverage is relatively high in Israel. All these figures reflect the

critical role of Israeli pediatricians in shaping the health and the future of children and the future of Israeli society in general.

## References

1. Amir G, Frenkel G, Bruckheimer E, et al. Neonatal cardiac surgery in the new era: lessons learned from 1000 consecutive cases. *IMAJ* 2016; 18: 645-8.
2. Baram N, Megged O, Weiser G. Occult bacteremia: should we look for the needle in the haystack? *IMAJ* 2016; 18: 649-51.
3. Berman J, Aran A, Berenstein-Weyel T, Lebel H. Exploring the association between Legg-Calvé-Perthes disease and attention deficit hyperactivity disorder in children. *IMAJ* 2016; 18: 652-4.
4. Cohen HA, Savitsky B, Ashkenasi A, Hoshen M. Seasonality of methylphenidate administration among children in Israel. *IMAJ* 2016; 18: 655-60.
5. Leitner Y, Mitelpunkt A, Posner I, Vardi N. Do you see it my way? The clinical evaluation of ADHD by the different pediatric subspecialties. *IMAJ* 2016; 18: 661-4.
6. Katz Y, Rothenberg ME. Infant feeding: swinging the pendulum from late to early introduction of food. *IMAJ* 2016; 18: 684-8.
7. Sweed Y, Singer-Jordan J, Papura S, Loberant N, Yulevich A. Angiographic embolization in pediatric abdominal trauma. *IMAJ* 2016; 18: 665-8.
8. Jawdat JR, Kocherov S, Chertin B. One-stage laparoscopic orchiopexy in the treatment of intraabdominal testis. *IMAJ* 2016; 18: 669-72.
9. Sukhotnik I, Aranovich I, Mansur B, Matter I, Kandelis Y, Halachmi S. Laparoscopic surgery of urachal anomalies: a single-center experience. *IMAJ* 2016; 18: 673-6.
10. Avinadav E, Almog A, Kravarusic D, et al. Point-of-care ultrasound in a department of pediatric and adolescent surgery. *IMAJ* 2016; 18: 677-9.
11. Jacob R, Shavit I. Emergency department pain management of acute abdominal pain and acute appendicitis in children. *IMAJ* 2016; 18: 689-91.
12. Rimon A, Shalom S, Wolyniez I, Gruber A, Schachter-Davidov A, Glatstein M. Medical clowns and cortisol levels in children undergoing venipuncture in the emergency department: a pilot study. *IMAJ* 2016; 18: 680-3.
13. Bin-Nun A, Wasserteil N, Nakhsh R, Hammerman C. Heparinization of long indwelling lines in neonates: systematic review and practical recommendations. *IMAJ* 2016; 18: 692-6.
14. Jacob R, Krauss B, Twito G, Leiba R, Shavit I. Emergency department pain management in children with appendicitis in a bi-ethnic population. Annual Conference of the Israeli Pediatric Association. Tel Aviv, Israel, November 2016.
15. Gelernter R, Kozler E. Computed tomography findings in young children with minor head trauma presenting to the emergency department more than 24 hours after the injury. Annual Conference of the Israeli Pediatric Association. Tel Aviv, Israel, November 2016.
16. Aronson-Schinasi D, An-Grogan Y, Berman L, Kolaitis IN, Nadel FM, Shaw KN. Using immersive simulation to engage pediatric residents in difficult conversations and the disclosure of medical errors. Annual Conference of the Israeli Pediatric Association. Tel Aviv, Israel, November 2016.
17. Erel Y, Youngster I, Kozler E. Fever and shivering: frequency and role in predicting serious bacterial infection. Annual Conference of the Israeli Pediatric Association. Tel Aviv, Israel, November 2016.
18. Allon R, Feldman O, Karminsky A, Steinberg C, Leiba R, Shavit I. Validity of the Canadian Triage Acuity Scale in a tertiary children's hospital in Israel. Annual Conference of the Israeli Pediatric Association. Tel Aviv, Israel, November 2016.
19. Tasher D, Rubin L, Grossman Z, et al. Child health care in Israel. *J Pediatr* 2016; 177S: S107-15.

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**"So many books, so little time"**

Frank Zappa (1940-1993), American musician, songwriter, composer, guitarist, record producer, actor and filmmaker