

## **IPROS – Israel Pediatric Research in Office Setting Network**

### **Red Pediátrica Israelí de Investigación en Clínicas (RPIIC)**

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The majority of pediatric patients in developed countries are being treated in ambulatory clinics and not in hospitals. There are several major differences between the two settings. First, the wide spectrum of clinical severity seen in the office differs from that seen in hospitals. This precludes generalization and application of results from studies done in hospitals and emergency rooms to the unselected patient population in the primary care clinics. Second, psychosocial morbidity is more frequently encountered in the pediatric primary care setting. Thus, primary care research advantages include the following: the sample represents the true character of the disease, research of psychosocial issues is enabled, it allows health care services research, and it helps to improve quality of care. There are, though, difficulties in accomplishing good primary care research. These obstacles are:

- lack of time,
- shortage of funding,
- little help in designing a study,
- difficulty in getting ethic approval,
- little or no help in statistic analysis,
- no help in writing down the manuscript for publication.

Loneliness of the solo practitioner and emotional involvement with patient care are additional negative factors.

To solve these issues, research networks were established. Research network is a number of primary care clinics grouped together in a structure of a network for the purpose of performing research in the community. The network is the research laboratory of the primary care setting. There are several research networks worldwide. PROS – The Pediatric Research in Office Setting network is an AAP directed network in the US. ASPN is the Ambulatory Sentinel Practice Network also in the US, and there are networks also in Italy, France, New Zealand, etc.

PROS is a practice based research network that was established by the AAP in 1986. As of January 2004, PROS consisted of 1860 practitioners from 677 practices in 50 states. Since its inception, PROS has studied child health topics as diverse as the prevalence of preschool vision screening, the onset of secondary sexual characteristics in young girls, the immunization status of children seen in private practices, the treatment of pediatric patients with psychosocial problems by primary care providers, and the management of very young febrile infants. The new knowledge generated in PROS studies has led to changes in the clinical guidelines of the AAP and other organizations.

IPROS, the Israel Pediatric Research in Office Setting Network, was established in 1996, and it is affiliated with the Israel Ambulatory Pediatric Association. IPROS consists now of 440 pediatricians.

The key elements in a network are: the participating pediatricians, the research projects, the intranet communication and the academic framework. The participating pediatricians in IPROS are highly motivated, they come from different setups of primary care, they represent different geographic regions and HMOs, and they treat patients who come from different socioeconomic backgrounds. The incentives for research are authorship in a publication, self-satisfaction, and other rewards.

The research projects are diverse, but there are common requirements for projects to succeed: they should interest the primary care pediatricians, they should be related to the daily practice, the design should be simple and easy, study duration should be relatively short, they should be managed within a reasonable budget and they should have no ethic complexity. A design that is a multi center study is of course preferable in the network framework. Intranet communication is crucial to the functioning of the network, and is based on the following means: telephone, fax, letters, emails and the IPRONET electronic mailing list. The list now consists of 290 pediatricians and its main characteristics are the rapidity of message exchange, the option to hold a virtual brainstorming on various clinical and research questions, and the unique opportunity to recruit pediatricians as future participants in studies.

IPROS holds annual meetings that are funded by pharmaceutical companies. In the meetings, new proposals are introduced, update and results of ongoing studies are presented, and interactive group discussions are taken. Funding of studies is through research grants given by the Israel Pediatric Association, the Israel Ambulatory Pediatric Association, and pharmaceutical companies.

The research coordinator is of critical significance to the flourishing of the network. Dr. Ernesto Kahan, who is an epidemiologist affiliated with the Tel Aviv University is part of the network leadership from the beginning. Dr. Kahan's advice on the various issues concerning studies done in the network was invaluable. His help in all research stages, from the correct designing up to the manuscript editing is very much responsible for the great success of our network.

IPROS has published, as of today, 15 articles in major scientific journals. The study types that were done were mainly intervention studies and attitudes survey.

Starting from a general description of the network<sup>1</sup>, the first study evaluated the phenomenon of unaccompanied children visits to the pediatrician's office<sup>2</sup>. Several attitude surveys were done on various topics: streptococcal pharyngitis<sup>3</sup>, fever<sup>6, 7</sup>, acetaminophen<sup>14</sup>, day care exclusion policy<sup>15</sup>. Intervention studies were done on the following subjects: otitis media<sup>8</sup>, spacers for asthma<sup>10, 12</sup>, and Echinacea propolis remedy for URI<sup>11</sup>. Drug prescription patterns were examined<sup>5</sup>, bacterial contamination of spacers was evaluated<sup>9</sup>, and physicians' burnout was described<sup>13</sup>.

In addition to the above subjects, IPROS is monitoring influenza activity during wintertime in the clinics. 30-40 pediatricians weekly report the level of activity in their clinics during the season. Each year, 3-4 times through the season, a cross country geographic "flu map" is created and handed to decision makers in the ministry of health and to the public.

Of notion, the cooperation with the Israeli HMOs has strengthened lately. Recently, multi center studies were done, with pediatricians working for different HMOs participating, and the HMOs providing approval of their participation with a very positive attitude. This also applies to the atmosphere prevailing while asking for ethic approvals for studies done in the community. Once only hospital approved studies, now such studies are approved and facilitated through HMOs specifically directed authorities.

In the future, collaboration with other networks is required. Pediatric healthcare is delivered differently in different countries, but medicine is the same everywhere. Cooperation between research networks is essential in order to give better answers to questions asked in the pediatric primary care. Uniting the experience of research in

this field will lead to upgrading the knowledge gained and benefit the pediatricians in both Israel and other countries. Latin America with its unique populations and pediatric services is a perfect niche for combining such experience and knowledge bases.

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