



Short Review of Child Health Care in Former Czechoslovakia and Czech Republic since 1993

Jan Janda, MD

We provide an overview on child health care in Czech Republic, including a historical background. Child health care has substantially improved in Czech hospitals during the past 20 years. Eight pediatric departments are located in university hospitals. The technical background of pediatric services meets high international standards. Inpatient and outpatient care is offered on a 24-hour service, and all pediatric subspecialties are usually provided. The different pediatric subspecialties are organized in the frame of the Czech Pediatric Society, and all of them have developed dynamic international scientific collaborations. From the organizational point of view, the formation of specialized centers of competence at university departments of pediatrics followed a mixture of a “bottom-up and top-down strategy” of all opinion and decision makers. (*J Pediatr* 2016;177S:S56-9).

In 1995, a review of child health care in the Czech Republic concluded that the future of Czech pediatrics lies in the hands of young pediatricians, particularly those who have studied abroad and worked with the latest technology; the knowledge of foreign languages is a prerequisite. Their role is to maintain our high standards of primary care and encourage the expansions of ambulatory pediatrics and hospital care for children and adolescents. Scientific research must also not be neglected. The standard of Czech pediatrics is catching up quickly with that of its Western European neighbors. It may take a while, but we believe and hope that full integration will be quicker than the 44 years from 1945-1989.¹

Before 1989, the ideology of communist leaders had put the care of children and adolescents at the center of their activities. The regime had offered strong support for educating the young generation according to the communist ideology, and it had focused on preventive care in child health care provision. However, even before this era, there had been a long-lasting Czech tradition of preventive medicine. The health care of children and adolescents was provided mainly by pediatricians, including a high proportion of Jewish physicians who, in the 1930s, were transported to concentration camps during the Second World War.²

Similar to the Russian system, a special medical school, under the name Faculty of Pediatrics, was established in the early 1950s with the aim to increase the number of pediatricians, which had decreased during the Second World War. This pediatric faculty produced young physicians who had a special curriculum with a classic 6-year undergraduate teaching that included practical training in child health care during the last 2 years by sending the students to pediatric department of district hospitals. The postgraduate curriculum had 2 levels. There were 2 different types of board examinations. One group of trainees had their final examination after the 3 years and was prepared to take over the primary care in polyclinics and smaller rural health centers, mainly focusing on preventive care. The other group passed the examination after 5-6 years of training in general and specialized pediatrics in hospitals.

The core of Czech primary care pediatrics and preventive services included regular clinical examinations, pediatric community services, and vaccinations (eg, the first massive vaccination with Sabin-Polio started in the former Czechoslovakia). Vaccination was obligatory; the vaccination rate was higher than 95%. The systemic preventive care of pregnant mothers and obstetric services resulted in a low newborn and infant mortality in early 1960s, which had been even lower than in most western European countries.³ The primary care pediatricians (PCPs) with a 3-year postgraduate training program had a lack of experience in serious and rare diseases, which led to a high number of unnecessary hospitalizations or to avoidable complications and death. Thus, there was a demand for hospital beds for children. Consequently, a high number of pediatric hospital beds and a high density of pediatric departments in hospitals were created (eg, 1 hospital pediatric department for 25 000 children and adolescents).

Basic Recent Demographic Data

In 2014, the number of inhabitants of the Czech Republic was about a 10.5 million people (**Table 1**). In the 1960s, the proportion of children under 15 years of age was around 20%, and at that time, the birth rate was approximately 200 000 newborns per year. The number of newborns decreased to approximately 105 000 in 2014, including 48 000 newborns of unmarried couples. The total number of abortions has consistently decreased

CPS	Czech Pediatric Society
GP	General practitioner
PCP	Primary care pediatrician
SPPCP	Society of Private Primary Care Pediatricians

From the Czech Pediatric Society, University Hospital Motol, Prague, Czech Republic

Please see the author disclosures at the end of this article.

0022-3476/\$ - see front matter. © 2016 Elsevier Inc. All rights reserved.
<http://dx.doi.org/10.1016/j.jpeds.2016.04.041>

Table I. Recent health statistics of the Czech Republic

	2013	2014
Total number of children and adolescents up 18 y	1 947 696	1 956 768
Number of children up 14 y	1 568 638	1 589 215
Infant mortality	2.48	2.39
Neonatal mortality	1.41	1.57
Perinatal mortality	4.40	4.60
Newborns with birth weight <2500 g	8561	8443
Crude birth rate (x 1000)	10.16	10.44
Fertility rate	1.46	1.53
Total number of pediatricians in the Czech Republic	3338	-
PCPs	2042	-
Neonatologists	207	-
Pediatric departments in hospital	90	89
Pediatric departments in hospital/1 million of population	8.57	8.54
Number of beds in wards	4018	3788
Life expectancy at birth - males	75.23	75.78
Life expectancy at birth - females	81.20	81.45
GDP in US \$ millions based on constant prices, constant PPPs, reference year 2010	284 801	290 435
(GDP, volume-annual growth rate in %)	-0.5%	2.0%
Expenditure for health in % of GDP	7.2%	-

DPT, diphtheria, pertussis, and tetanus; GDP, gross domestic product; PPPs, purchasing power parities.

since 1990 (124 146), and in 2014, 36 956 abortions were recorded, 13 857 of which were spontaneous.

The proportion of children and adolescents was about 20% of the total population. The total fertility rate has decreased from 2.09 recorded in 1960 to 1.53 in 2014. The neonatal and infant mortality rates were 1.6 and 2.4 per 1000 in 2014, respectively, comparing well with the best-developed countries taking also into account that the rate of preterm infants reached about 8% of all deliveries (Table II). In the 1990s, approximately 2000 pediatricians worked in primary care in pediatric polyclinics or in outpatient services, and 1000 pediatricians worked in pediatric departments of hospitals.

Primary Care Pediatrics

Today, this system of pediatric primary care by pediatricians continues to exist and the Czech Republic does not involve general practitioners (GPs) in primary child health care. Indeed, all parents in the Czech Republic can choose their own pediatrician at the level of primary care. Changes after the Velvet Revolution in 1989 resulted in transition of national health services to private pediatric practice offices. The Czech Pediatric Society (CPS), Jan Evangelista Purkyně, has always been aware of differences of organizing primary and hospital care and that fragmentation of child health care should be avoided. After 1989, CPS helped Czech PCPs in learning across borders by establishing contacts with other pediatric societies in Europe, such as the German Professional Association of Child and Adolescent Physicians. The newly established Czech organization of PCPs (Society of Private Primary Care Pediatricians [SPPCP]) continued to build bridges with other societies. It played an important

positive role in the transition of the National Health Service into private pediatric practice. Successful negotiations with health insurance companies asserted that Czech pediatricians are paid per capita of their clients for the preventive and curative care for children and adolescents until their 19th birthday.

In 1997, SPPCP established a second, more scientifically-oriented society, which is well integrated in European pediatrics and networked with international PCPs. Both entities have become important partners for health insurance companies and for the Czech Ministry of Health. The good message is that care of children and adolescents remains today in the hands of pediatricians and not in the hands of GPs. SPPCP publishes its own monthly journal (*Vox Pediatrica*; <http://www.detskylekar.cz/vox>) with professional and educational articles. This journal also informs its members on the problems of management of their pediatric offices. In addition, SPPCP organizes a range of workshops and conferences that teaches and trains pediatricians in new diagnostics and treatment strategies.

The core of work of Czech PCPs is preventive care, standardized preventive pediatric examinations (10 of them during the first year of life), follow-up of child development, helping families to solve social problems, keeping a high vaccination rate, and managing a rather complicated vaccination schedule after introduction of voluntary recommended vaccines (pneumococcal invasive disease, human papillomavirus, rotavirus vaccine, etc) In addition, Czech PCPs are successfully supporting the promotion of breastfeeding. Their work also includes consultation with parents whose children or adolescents are addicted to alcohol, cigarettes drugs, and gambling, all of which have increased recently. An important tool for preventive care is the health and vaccination record, which takes the form of a small brochure. This medical booklet is distributed to all mothers after delivery, and it remains the property of the family. The CPS was probably a pioneer in not only including growth charts but by expanding the medical booklet with percentile curves for evaluation of blood pressure in childhood and adolescence.⁴

Unfortunately, after 2003, SPPCP managed to push through a separate educational graduate program that shortened postgraduate pediatric training to 4 years. This allows pediatricians to work only in primary pediatric care but not in the wards of children's hospitals. Thus, the Czech Republic has 2 types of education for pediatricians, which is a unique system in the world. The pediatricians with the classic 5-year postgraduate education are not allowed to work in primary pediatric care unless they pass a special curriculum for practical pediatrics. This system blocks the interchangeability of physicians. It increases fragmentation of child health care services, and it makes the transfer of patients and medical information between primary care practices and hospital pediatrics more complicated. After 20 years, it looks as if there will be a chance to align with other European training programs in order to create only one curriculum for all pediatric trainees.

The contemporary problems of child health care services in the Czech Republic relate to the high mean age (57 years) of

Download English Version:

<https://daneshyari.com/en/article/4164345>

Download Persian Version:

<https://daneshyari.com/article/4164345>

[Daneshyari.com](https://daneshyari.com)