### Information about the authors:

Bourtseva Tatiana Egorovna, Deputy Director for science of FGBNU "YNC KMP", electr.email: bourtsevat@yandex.ru, cont. phone: 89142943244, FGBNU "YNC KMP"

Grigorieva Antonina Nikolaevna, Deputy Minister of Health of the Republic of Sakha (Yakutia),

Chychahov Dulustan Anatolievich, M. D., chief pediatrician of Ministry of health of Sakha (Yakutia).

Afanasieva Lena Nikolaevna, PhD, head of the Department of health Yakutsk, lecturer of SVFU

Evseeva Sardana Anatolievna, electr.

email: sarda79@mail.ru, cont. phone: 89679111195, FGBNU "YNC KMP"

Savvina Maya Semenovna, Ph. D., senior researcher YNC KMP

Vasilyeva Aiza Anatolievna neonatologist RB№1-NCM.

MATERIALS OF THE CONFERENCE «ACTUAL PROBLEMS OF PEDIATRICS», DEDICATED TO THE 25TH ANNIVERSARY OF RH№1 - THE NATIONAL CENTER OF MEDICINE OF THE HEALTH MINISTRY OF THE RS (YA)

L.A. Nikolaeva, K.Ya. Matveeva, T.E. Burtseva, S.A. Evseeva

# THE INCIDENCE OF HOSPITALIZED CHILDREN AND ADOLESCENTS OF THE REPUBLIC OF SAKHA (YAKUTIA)

## **ABSTRACT**

Improving the availability and quality of specialized and high-tech medical care to children and adolescent is one of the priority tasks of state policy in the sphere of health care [1-3]. Pediatric center "Republican hospital №1-National center of medicine" (Director, PhD Lyudmila Alekseevna Nikolaeva) is the country's only medical institution providing specialized, highly skilled and high-tech medical care for child and adolescent population. The article presents data of hospitalized morbidity of children and adolescents of the Republic of Sakha (Yakutia) on applications to a Pediatric Centre for a 15 year period.

Keywords: children, adolescent, incidence of morbidity, Yakutia.

## INTRODUCTION

Historically, despite the vast territory, the network of medical institutions providing specialised and high-tech medical care for children's population is extremely centralized in the city of Yakutsk. GBU Pediatric center "Republican hospital №1-National center of medicine" this is the only medical institution in the Republic, providing specialized, highly skilled and high-tech medical assistance to children and adolescents.

According to official statistics, reflecting the state of health of patients, primary and general morbidity of children and adolescents is extremely heterogeneous and varies in the Republic of Sakha (Yakutia) over a wide range. During the study period a marked increase in the rates of primary and total morbidity of children and adolescents in Sakha (Yakutia), associated of course with the increased availability of medical care provision to this population, as well as high detection of disease using modern methods of diagnosis [4,5]. And yet, in our opinion the most adequate picture of the health status of children and adolescents can give the analysis of the hospitalized morbidity of children and adolescents in the only specialized medical-prophylactic institution of the Republic.

# **MATERIALS AND METHODS**

In the framework of the present study the aim was to investigate the dynamics

of the hospitalized morbidity of children and adolescents of the Republic of Sakha (Yakutia), GBU Pediatric center of the Ministry of health of the Republic of Sakha (Yakutia) "Republican hospital №1-National center of medicine" for the period from 2001 to 2015. All the results are processed by known methods of statistical analysis.

# **RESULTS**

Pediatric center, GBU RS (Ya) "Republican hospital №1-National center of medicine" started its work in 2000. As shown in table 1 since 2000, the hospital is equipped with 172 beds and bed fund gradually expanded to meet the needs and uptake of child and adolescent population. Thus, in 2001 the hospital is equipped with 302 beds since 2002, 312 beds pediatric.

Annually in the department of the pediatric center come from 7383 kids (2001) 10228 children in 2015. The proportion of patients from the village from 27.1% in 2001 to 33.5% in 2015,

due to the fact that rural areas are home to 45% of the total child population. About 60% of the basis of the specialized branch of medical. Emergency patients account for 40 % of all hospitalized.

The structure of hospitalized patients in perinatal center "Republican hospital №1-National center of medicine" presented in table 2. In our opinion the most adequate picture of the health status of children and adolescents of the Republic of Sakha (Yakutia) reflects the hospitalized morbidity. In dynamics since 2001 in almost all classes of diseases observed increase in the incidence of hospitalized children and adolescents of the Republic of Sakha (Yakutia). In the structure of hospital morbidity of the child population in 2015 1 - diseases of the nervous system (669.6 per 100.000 child population), 2 - diseases of the respiratory system (511.9), 3 - injuries and poisoning (503.8), 4 - diseases of the genitourinary system (403.5), 5 diseases of the digestive system (371.8).

Table 1

Key performance indicators, hospital GBU Pediatric center of the Ministry of health of the Republic of Sakha (Yakutia) «Republican hospital №1-National center of medicine» for 2000-2015

	2000	2005	2010	2011	2012	2013	2014	2015	2016
The number of beds	277	312	312	312	312	312	312	312	312
admitted to the hospital	7234	8650	9768	9726	10324	9808	10245	10228	10285
discharged from hospital	7203	8661	9784	9596	10361	9757	10212	10194	10271
The proportion of patients from the village, in %	37,4	28,9	31,6	30,4	32,0	31,7	39,8	33,5	29,8
The proportion of emergency patients, in %	32,5	46,0	47,3	44,8	49,0	43,3	41,7	40,9	40,3

Table 2

The increase of the total hospital morbidity 2010 by 2015 was 337.8 per 100.000 children and adolescents (2010- 3610.0; 2015.-3947.8). The total incidence of hospitalized morbidity of children and adolescents have increased since 2010 in the following classes of diseases: diseases of the nervous system (of 185.6); diseases of the digestive system (22.2); diseases of the genitourinary system (79.9); endocrine, nutritional and metabolic disorders (14.7); neoplasms (57.8), including malignant (14.9). The sharp negative trend in the incidence of hospitalized children and adolescents with diseases of the ear, nose and throat associated with the reorganization and the transfer of responsibility for treatment of these

patients in city children's infectious

# CONCLUSIONS

hospital.

Thus, the analysis of the structure of hospitalized children and adolescents in children's treatment-and-prophylactic institution of the Republic of Sakha (Yakutia) showed that for the period from 2001 to 2015 there is a clear increase in the level of hospital morbidity of children and adolescents. In the structure of morbidity in the first place are diseases of the nervous system, on the second illnesses of respiratory organs, on the third - traumas and poisonings. The hospitalized morbidity is a continuous process of optimization of the number of beds of the pediatric center.

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Hospitalized morbidity of children population The Republic of Sakha (Yakutiya) according the Pediatric center «Republican hospital №1-National center of medicine» (per 100 000 of children population)

Name classes of diseases according to ICD X	2001	2010	2015	growth from 2010 to 2015
All, including	2387,6	3610,0	3947,8	337,8
J00-J99 Diseases of the respiratory system	383,4	528,8	511,9	-16,9
S00-T98 Injuries, poisoning and some other consequences of external causes	327,0	514,8	503,8	-11,0
G00-G99 Diseases of the nervous system	228,9	484,0	669,6	185,6
Q00-Q99 Congenital anomalies, malformations, deformations and chromosomal abnormalities	150,4	372,8	356,3	-16,5
K00-K93 Diseases of the digestive system	286,6	349,6	371,8	22,2
N00-N99 Diseases of the genitourinary system	226,6	323,6	403,5	79,9
EE00-E90 Endocrine, nutritional and metabolic disorders	112,9	232,4	247,1	14,7
C00-D48 Tumors	75,2	216,0	273,8	57,8
Including malignant	-	81,2	96,1	14,9
L00-L99 Diseases of the skin and subcutaneous tissue	161,6	193,2	168,1	-25,1
H60-H95 Diseases of the ear and mastoid process	118,9	171,2	52,7	-118,5
I 00-I99 Diseases of the circulatory system	67,2	149,2	127,0	-22,2

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# Information about the authors:

1. Nikolaeva Lyudmila Alekseevna -PhD, Director of the GBU Pediatric center of the Ministry of health of the Republic of Sakha (Yakutia) "Republican hospital №1-National center of medicine"

- 2. Matveeva Klavdiya Yakovlevna Head of organizational-methodical Department of the GBU Pediatric center of the Ministry of health of the Republic of Sakha (Yakutia) "Republican hospital №1-National center of medicine"
- 3. Bourtseva Tatiana Egorovna, Deputy Director for science of FGBNU "YNC KMP".
- 4. Evseeva Sardana Anatolievna -Junior researcher, FGBNU "YNC KMP", Postgraduate Student of Saint Petersburg State Pediatric Medical Academy, Saint Petersburg

Address for correspondence: bourtsevat@yandex.ru

Postal address: 677019, Yakutsk, Sergelyakhskoe highway, 4

Yakutsk Science Center of Complex Medical Problems.

