

the dying patient. With increasing numbers of patients with palliative care requirements, greater integration and expansion of medical undergraduate palliative care education is advocated.

Epidemiology

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POSTER

Childhood cancer mortality in the Belgrade population during the period 1980–1997

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Purpose: The aim of this investigation was to estimate cancer mortality in childhood in the Belgrade population during the period 1980–1997.

Methods: Mortality data of cancers in childhood in Belgrade were analyzed according to the death records for the period 1980–1997. Mortality rates were adjusted by direct method using world population as a standard. Fisher's test was used in estimation of the significance of the linear regression coefficient.

Results: In Belgrade, malignant tumors in the age up to 14 years had 0.49% in the mortality structure of all cancers during the period 1980–1997. The average standardized mortality rate of all cancers was 1.49 per 100,000 (95%CI 0.48–3.47) with a significantly decreasing tendency ($p = 0.009$). Age-specific rates were the highest in the age group 5–9 years with average value of 5.08/100,000 (95%CI 1.65–11.84) (for boys 5.92/100,000 - 95%CI 1.92–13.79, and for girls 4.19/100,000 - 95%CI 1.36–9.76). Haematological malignancies (43.55%), brain tumours (25.81%) and soft tissue and bone tumors (10.08%) were the most frequent cancers in childhood in the Belgrade population, for the observed period. The average standardized mortality rates were 0.26/100,000 (95%CI 0.01–1.45) for leukemia, 0.34/100,000 (95%CI 0.1–1.89) for Hodgkin's disease, and 0.05/100,000 (95%CI 0.001–0.28) for non-Hodgkin's lymphomas. The elevated mortality trends were registered for leukemia ($p = 0.678$) and non-Hodgkin's lymphomas ($p = 0.342$), whereas a high significant decreasing trend was presented for Hodgkin's disease ($p = 0.001$). For brain tumours ($p = 0.954$), and soft tissue and bone tumors ($p = 0.952$), a decreasing mortality trends were observed too.

Conclusion: According to observed mortality rates, the risk of death due to malignant tumors in childhood in the Belgrade population is low. These findings are in accordance with the better treatment results and longer survival of children with many types of cancer registered in recent years.

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POSTER

Cancer morbidity in West Belarus

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Purpose: The territory of Belarus can be divided on two parts: 'dirty' territory (i. e. territory polluted after Chernobyl accident) and 'clean' territory. Grodno is situated in 'clean' territory of Belarus. We decided to compare the indices of cancer morbidity until and after Chernobyl accident in 'clean' zone.

Methods: All cases study of the patients with cancer (excluding oncogynecology data) has been noticed in the same city district during 1985, 1986 and 1995–2000. The index of cancer morbidity (ICM) on 100,000 of population was calculated.

Results: The all new revealed annually cases of cancer (from number of population about 50,000) are presented in the table below.

	Index Year							
	1985	1986	1995	1996	1997	1998	1999	2000
Male	104	90	82	99	105	108	93	70
Female	89	80	80	92	78	104	103	67
Totally	193	170	162	191	183	212	196	137
ICM	347.8	306.4	295.6	348.5	330.3	382.6	351.1	280.6

Conclusion: due to the data obtained in Grodno (West Belarus), we can observe not a substantial difference in ICM between years until and after Chernobyl accident. Also, in all years (in spite of female population prevalence) the male new revealed cases of cancer are prevalent.

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POSTER

Some epidemiological data of cancer in West Belarus

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Purpose: The territory of Belarus conditionally divides into two parts: 'dirty' territory (i. e. territory polluted after Chernobyl accident) and 'clean' territory. Grodno is situated in 'clean' territory of Belarus. We decided to compare frequency of the oncologic diseases before Chernobyl accident and after it.

Methods: All cases study of the patients with cancer (excluding oncogynecology data) has been noticed in the same city district during 1985, 1986 and 1995–2000 (from number of population about 50,000). The three most numerous kinds of cancer determined annually between 1) lung cancer (LC); 2) cancer of gastrointestinal tracts (CGT); 3) breast cancer (BM) and 4) hematologic malignancies (HM).

Results: The 3 major kinds of cancer are presented in the table below.

Cancer (%)	Year							
	85	86	95	96	97	98	99	00
LC	18	16	16	14	12	14	14	8
CGT	26	22	21	21	26	18	18	21
BM	11	10	11	11	—	14	14	9
HM	—	—	—	—	26	—	—	—

Conclusion: Due to the data obtained, in west Belarus ('clean' zone) we did not observe an increase of major groups of oncologic diseases after Chernobyl accident. The increase in HM, in 1997, is possibly explained by effect of low radiation dose accumulation. The higher levels of CGT group is due to the traditionally high consumption of animal fats and, conversely, low consumption of fruits and vegetables.

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POSTER

Epidemiology of thyroid gland carcinoma (TGC) in West Belarus

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Purpose: Thyroid gland is one of the target organs for the radioactive isotopes after radioactive pollution. We decided to compare the indices of TGC morbidity during 12 years after Chernobyl accident in area free from radioactive pollution.

Methods: All cases study of the patients with primary TGC has been noticed in the same city district of city Grodno (from average number of population 50,250) during 1989–2000.

Results: The all new revealed annually cases of TGC (usually stage I–II) are presented in the table below.

	Year											
	1989	90	91	92	93	94	95	96	97	98	99	00
Cases of TGC	1	—	1	4	3	2	1	—	—	3	1	2

The average age of the patients ($n = 18$) was 41.5. Follicular carcinoma was presented in 80% of TGC. The treatment of TGC was surgical in all cases and (in 27.8%) radiation therapy too. Two patients (11.1%) had relapses of carcinoma after 1 year and 7 years after the treatment.

Conclusion: due to the data obtained, we can observe a) extraordinary high level of namely of follicular carcinoma between all cases of TGC and b) the level of TGC was maximal 6 years after Chernobyl accident. In our opinion the first fact probably is connected both with low doses of radiation accumulation after Chernobyl accident (1986) and with the endemic goiter area in which territory of Belarus is situated. The last conclusion supports the assumption of low dose radiation influence on TGC.

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POSTER

Incidence of childhood cancer in Belarus, 1994–1998

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This report provides results of the analysis of trends in childhood cancer incidence in Belarus in 1994–1998. For the 5-year period a total of 1645 cancer cases have been registered in Belarus Childhood Cancer-subregistry (data-base of epidemiological department of Belorussian Center for Pediatric Oncology and Hematology, Minsk) in children under 15 years of