

**PANCREATIC CANCER - STATISTICS ON PATIENTS IN PRILEP, REPUBLIC OF
NORTHERN MACEDONIA IN THE PERIOD FROM 2014 TO 2019****Jihe Zhu*¹, Blagica Arsovska^{1,2} and Kristina Kozovska^{1,3}**¹Faculty of Medical Sciences, University Goce Delchev, Shtip, Republic of Macedonia.²Institute of Biology, Faculty of Natural Sciences and Mathematics, Skopje, Republic of Macedonia.³Medicine Faculty, St. Cyril and Methodius University of Skopje, Republic of Macedonia.***Corresponding Author: Jihe Zhu**

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ABSTRACT

Pancreatic cancer is a highly fatal disease with a 5-year survival rate of approximately 10%, and it is becoming an increasingly common cause of cancer mortality. The main focus of this research is to show the incidence of pancreatic cancer. These data were obtained through the PHI Center for Public Health - Prilep and refer to the incidence of pancreatic cancer, on the territory of the Municipality of Prilep, in patients treated in hospital and in private clinics in period from 2014 to 2019. According to the data, in the period from 2014 to 2019 there were total of 20 diagnosed patients with pancreatic cancer. Every year there is an average of 3 newly diagnosed cases. The highest number of registered cases is in 2019 - a total of 6, and the lowest number is in 2017 - 1 case. The disease on the territory of the Municipality of Prilep occurs more often in men than in women in a ratio of 3:1, which corresponds to the global trends. Pancreatic cancer is associated with older people. For the period from 2014 to 2019 there were 16 registered patients older than 55 years. Globally, the median age of patients diagnosed with pancreatic cancer is 70 years. Due to the inability to detect the disease early, extremely difficult to make a correct diagnosis, limited treatment options, very short survival time and unclear etiological causes, all this leads to pancreatic cancer being the biggest public health challenge today.

KEYWORDS: Pancreas, cancer, statistic, oncology.**INTRODUCTION**

The name pancreas comes from the Greek words “πᾶν” (whole) and “κρέας” (meat), due to the fleshy consistency of the pancreas and the absence of bones and ligaments. The pancreas plays a key role in controlling the level of glucose or blood sugar and its metabolism in the human body. Worldwide, pancreatic cancer is the eighth leading cause of death in men, with an average of 138,100 men dying from pancreatic cancer each year and the ninth leading cause of death in women with 127,900 deaths from pancreatic cancer in women each year. It typically occurs in people living in western countries and in industrialized parts of the world.

Some of the no hereditary risk factors that lead to pancreatic cancer are: age, cigarette smoking, alcohol consumption, diabetes, impaired glucose metabolism, insulin resistance, obesity, infections, coffee consumption, blood type other than O. 10% -15% of patients have a genetic basis that leads to pancreatic cancer.

Certain signs and symptoms may be indicative of early-stage pancreatic cancer like - Jaundice - ie yellowish discoloration of the skin, whites and visible mucous

membranes. Steatorrhea - existence of light-colored, stinking, sticky and abundant stools. Itching on the body that occurs as a result of bile salt retention in the body, dark urine, existence of abdominal pain, weight loss, nausea, vomiting, feeling of fullness, diabetes, constipation.

In order to make a correct and timely diagnosis it is necessary to take a thorough history, clinical examination, laboratory tests, diagnostic imaging tests like computed tomography, magnetic resonance imaging, positron emission tomography and endoscopic ultrasonography.

Pancreatic cancer can be categorized into: localized and systemic metastatic disease. Patients with systemic disease are treated with systemic chemotherapy, palliative surgery, endoscopic interventions, and palliative care. Patients where the tumor process is localized should be divided into several groups depending on resectability, as follows: resectable tumor lesion, borderline resectable tumor lesion, non-resectable tumor lesion. The treatment for each group is further done according to a standardized algorithm.^[1-7]

MATERIAL AND METHODS

For the purposes of this research is used analytical-descriptive method of work for processing data for the number of diagnosed patients with prostatic cancer in the period from 2014 to 2019 in the municipality of Prilep. The data obtained in this paper are systematized and presented in tables and graphs, in terms of the exact number of patients each year, in relation to the gender of the patients in the same period and the age when this disease was diagnosed.

RESULTS AND DISCUSSION

Table 1: Number of newly diagnosed patients by year.

Year	Number of patients
2014	4
2015	3
2016	2
2017	1
2018	4
2019	6

Table 1 clearly shows the number of new cases of pancreatic cancer. The largest number of cases are

Table 3: Number of patients represented by age groups for a period 2014-2019.

Age	20 - 24 y	25 – 34 y	35 – 44 y	45– 54 y	55 – 64 y	65 – 74 y	>75y
Number of patients	0	0	2	2	6	7	3

Table 3 shows the number of patients on the territory of the Municipality of Prilep divided into age groups. From these data presented it can be noted that the occurrence of pancreatic cancer is associated with older people, ie

registered in 2019 - a total of 6, and the lowest number of newly diagnosed patients in 2017 where is registered only 1 case. In the period from 2014 to 2019 there are total of 20 diagnosed patients with pancreatic cancer, ie it can be said that every year there is an average of 3 newly diagnosed cases.

Table 2: Newly diagnosed patients by gender.

Year	Men	Women	Total number
2014	4	0	4
2015	0	3	3
2016	2	0	2
2017	1	0	1
2018	4	0	0
2019	4	2	6

From table 2 it can be concluded that this disease on the territory of the Municipality of Prilep occurs much more often in males as opposed to females in a ratio of 3:1 which corresponds to global trends, where this disease occurs far more often in males than female.

Table 4: Newly diagnosed patients by gender and age groups for 2014.

Age	20-24y		25-34y		35-44y		45-54y		55-64y		65-74y		>75y		Total	
	m	w	m	w	m	w	m	w	m	w	m	w	m	w	m	w
Numer of patient	0	0	0	0	0	0	2	0	0	0	2	0	0	0	4	0

people over the age of 55 where for the period from 2014 to 2019 there are 16 patients registered older than 55 years.

Table 5: Newly diagnosed patients by gender and age groups for 2015.

Age	20-24y		25-34y		35-44y		45-54y		55-64y		65-74y		>75y		total	
Gender	m	W	m	w	m	W	m	W	m	W	m	w	m	w	m	W
Numer of patient	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0

Table 6: Newly diagnosed patients by gender and age groups for 2016.

Age	20-24y		25-34y		35-44y		45-54y		55-64y		65-74y		>75y		total	
Gender	m	w	m	w	m	w	m	w	m	w	m	w	m	w	m	w
Numer of patient	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0

Table 7: Newly diagnosed patients by gender and age groups for 2017.

Age	20-24y		25-34y		35-44y		45-54y		55-64y		65-74y		>75y		total	
Gender	m	w	m	w	m	w	m	w	m	w	m	w	m	w	m	w
Numer of patient	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0

Table 8: Newly diagnosed patients by gender and age groups for 2018.

Age	20-24y		25-34y		35-44y		45-54y		55-64y		65-74y		>75y		total	
Gender	m	w	m	w	m	w	m	w	m	w	m	w	m	w	m	w
Numer of patient	0	0	0	0	0	0	1	0	2	0	1	2	0	0	4	2

Table 9: Newly diagnosed patients by gender and age groups for 2019.

Age	20-24y		25-34y		35-44y		45-54y		55-64y		65-74y		>75y		total	
Gender	m	w	m	w	m	w	m	w	m	w	m	w	m	w	m	w
Numer of patient	0	0	0	0	1	0	0	0	2	0	1	0	0	0	4	0

The data follows global trends, where 2/3 of patients are over the age of 65, with a tendency to lower the age limit. This is clearly evident in this study because 25% of newly diagnosed patients in the above period are under 55 years of age.

From the analysis of these data it can be concluded that pancreatic cancer on the territory of the Municipality of Prilep is much more common in males than females who also follow the global trends where this malignant disease can be said that it typically occurs in men.

CONCLUSION

Pancreatic cancer is a devastating disease. Until now, there is no effective treatment for patients with distant metastatic changes, so 50% of diagnosed patients die within the first six months after diagnosis. A major drawback in the fight against this malignant disease is that routine screening of the general population is not yet possible. Due to the inability to detect early, extremely difficult to make a correct diagnosis, limited treatment options, very short survival time and unclear etiological causes, all this leads to pancreatic cancer being the biggest public health challenge today.

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