

**The review of Professor's Avraam Koten
to scientist research of PhD
Doctor Olzhas K.Zhandossov
on « The epidemiology of gastric cancer
in Republic of Kazakhstan and Almaty city»
to academy degree PhD Doctor of Philosophy
to: 6D110200 "Public Health"**

About 990 000 new cases of gastric cancer are diagnosed annually in the world and this malignant neoplasm is the second most common cause of cancer death, also the fourth most common in the world after lung cancer, breast cancer and colorectal cancer.

Etiologically, gastric cancer is a multifactorial disease. According to the literature, genetic and environmental factors, as well as lifestyle factors, are reasons for the development of gastric cancer. Some of these factors, like age and gender, remain unchanged, while smoking and *Helicobacter pylori* infections are potentially modifiable. At the same time, the risk factors for the development of gastric cancer localized in the cardia and non-cardiac region of the stomach differ significantly. So, obesity and gastroesophageal reflux disease are considered factors of gastric cancer of cardiac localization, while *Helicobacter pylori* infection is considered one of the key causes of non-cardiac gastric cancer. Low socioeconomic status, possibly dietary factors such as low consumption of fruits and vegetables and high consumption of salted and smoked foods. At the same time, old age, smoking, radiation exposure, and history of family status are common risk factors for tumor development both in the cardia and in the non cardiac parts of the stomach.

The incidence of gastric cancer worldwide varies widely by gender and nationality, with about 2/3 of gastric cancer cases occurring in developing countries, with the incidence 2-3 times higher in men than in women.

The highest incidence rates of gastric cancer are observed in countries of East Asia (35 per 100000), eastern Europe(21 per 100000), South America (15 per 100000), and African countries (3-4 per 100000) of the population.

Mortality of gastric cancer in the world over the past decade has been steadily decreasing, which is primarily due to the early diagnosis of this disease and the improvement of combined new integrative treatment methods. The annual decline in mortality rates from gastric cancer from 1980 to 2005 was observed in the Netherlands, Great Britain, France and the countries of Northern Europe. If this persists, and in the future, mortality rates from gastric cancer from 2005 to 2030 will decrease by about 66% in the majority of the population, while the absolute number of deaths from gastric cancer will decrease by about 50%. It should be noted, however, that as of 2012, the highest rates of gastric cancer were reported in countries East Asia (24 per 100000), and Western Asia (11per 100000), central and eastern Europe(17 per 100000), South America (12 per 100000), Northern Europe(5 per 100000) and Australia and New Zealand (3

per 100000), and African countries (5-6 per 100000) of the population.

The only radical treatment for gastric cancer is a full-scale surgical operation, often with removal of rectal lymphatic collectors, and only in case of cancer in situ (stage 0 of the disease), endoscopic removal of the tumor is possible. While chemotherapy and radiation therapy are used as adjuvant treatment. A feature of the course and prognosis of gastric cancer, like most malignant neoplasms is the direct dependence of the success of treatment and patient survival on how early the tumor was detected. So, the prognosis of gastric cancer is better in the early stages of the disease, when the tumor process is limited to the wall of the stomach, and there is no damage to nearby and distant lymph nodes.

The relevance of this work lies on carrying out of a comprehensive assessment, medical and organizational effectiveness of the implementation of care for patients with gastric cancer in Republic of Kazakhstan.

Purpose of the study is assess the state of morbidity in the organization of medical preventive care for patients with gastric cancer in the Republic of Kazakhstan and to develop practical recommendations aimed at optimizing the organization of medical care. To confirm the purpose of the study, doctoral students studied the epidemiological features of gastric cancer in the world and among the population of the Republic of Kazakhstan. A descriptive analysis of the incidence of gastric cancer among the adult population of Almaty for the 2014-2019 was carried out. The organization of medical care at the level of primary (polyclinic care) and secondary level (hospital) of the health care system was assessed. The level of satisfaction of patients by the medical staff of the hospital was studied and evaluated and practical recommendations were developed to improve the provision of medical services. Doctoral students carried out information and analytical analysis of modern bibliographic scientific sources, analysis of regulatory documents. The theoretical significance of the doctoral students research is determined by the fact that for the first time the epidemiology of gastric cancer has been analyzed, the areas of prevalence and 5-year survival in Almaty are determined. Studied and assessed of the quality of medical care at the hospital care.

Therefore, scientist research of PhD Doctor Olzhas K. Zhandossov on «The epidemiology of Gastric cancer in Republic of Kazakhstan and Almaty city» to academy degree PhD Doctor of Philosophy to: 6D110200 «Public Health» fully compliance with the requirements Ministry of Education and Science of Republic of Kazakhstan and the author deserves a doctorate PhD to: 6D110200 «Public Health».

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