

Gastric cancer – statistical analysis data in a 5 year period in Prilep, Republic of North Macedonia

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Abstract

Gastric cancer is a disease in which the cells that form the inner lining of the stomach grow abnormally and divide uncontrollably, forming a mass called tumor. For the purposes of this paper was used data from the Center for Public Health “Borka Taleski” – Prilep, Republic of Northern Macedonia in the period of 2015 to 2019 ie within 5 years. According to the research, men are the ones who suffer more from gastric cancer. People aged 65 to 74 are the most at risk. According to the results in 2015, the presence of gastric cancer in men is bigger ie 53% than women - 47%. For 2016 the presence of gastric cancer in men is bigger ie 82% than women - 18%. For 2017 the presence in men is 80% and in women is 20%. For 2018, the presence of gastric cancer in men is 65% and in women is 35%. For 2019 the presence of malignant neoplasm in men is 62% and in women is 38%. In the followed period from total number of patients with gastric cancer 63 are men and 46 are women.

Key words: gastric, cancer, statistics, analysis, Macedonia

1. Introduction

Gastric adenocarcinoma has been the leading cause of cancer death worldwide almost throughout the 20th century. Today, it ranks second immediately after lung cancer, with 875,000 new cases of adenocarcinoma worldwide each year. However, in many parts of the world, the incidence of gastric cancer has gradually decreased, mainly due to changes in diet, food preparation and environmental factors.

Body adenocarcinomas and gastric antrum are strongly associated with H.Pylori -infection. There are many factors that can interact with N. Pylori for stomach cancer, this includes tobacco, the age at which the infection occurred, gender and diet. Type I is polypoid or exophytic, type II includes ulcerative lesions surrounded by raised edges, type III is an ulcerative lesion infiltrated in the stomach wall, type IV is diffuse infiltrating tumor, and type V is cancer that is unclassified. Gastric carcinoma may spread locally to nearby structures and may present with lymphatic, peritoneal, and distant metastases.

Due to the vague, nonspecific symptoms that characterize gastric cancer, in most patients the diagnosis is made at an advanced stage of the disease. Patients may have a combination of signs and symptoms such as weight loss, anorexia, fatigue, and epigastric discomfort. In some patients, symptoms may indicate the presence of lesions at specific sites.

Patients with early-stage gastric cancer, they have a good or great chance of being cured only with a surgical procedure. Several studies have evaluated only radiotherapy (without concomitant chemotherapy) in addition to surgical resection of gastric cancer. Endoscopy is generally considered to be the best method for diagnosing gastric cancer. Endoscopy directly visualizes the gastric mucosa and allows tissue biopsy for histological diagnosis. Once gastric cancer is suspected, abdominal and pelvic STs are an important part of stage assessment. Positron emission tomography (PET) of the whole body is increasingly used to assess gastrointestinal malignancies. Laparoscopy is an accepted part of pre-treatment evaluation to determine the stage of the disease for patients believed to have localized gastric cancer after initial spiral ST assessment.

There is little data in the oncology literature on the local effects of gastric cancer therapy and its long-term effects. The presence of dumping syndrome is well known, with diarrhea and cramps. There is also reactive hypoglycaemia that can occur as a result of rapid release of

insulin after a meal due to a small gastric reservoir. In addition to dumping syndrome, there are a number of malabsorption problems that can be significant. There is enough data on the poor absorption of vitamin B12. [1-10]

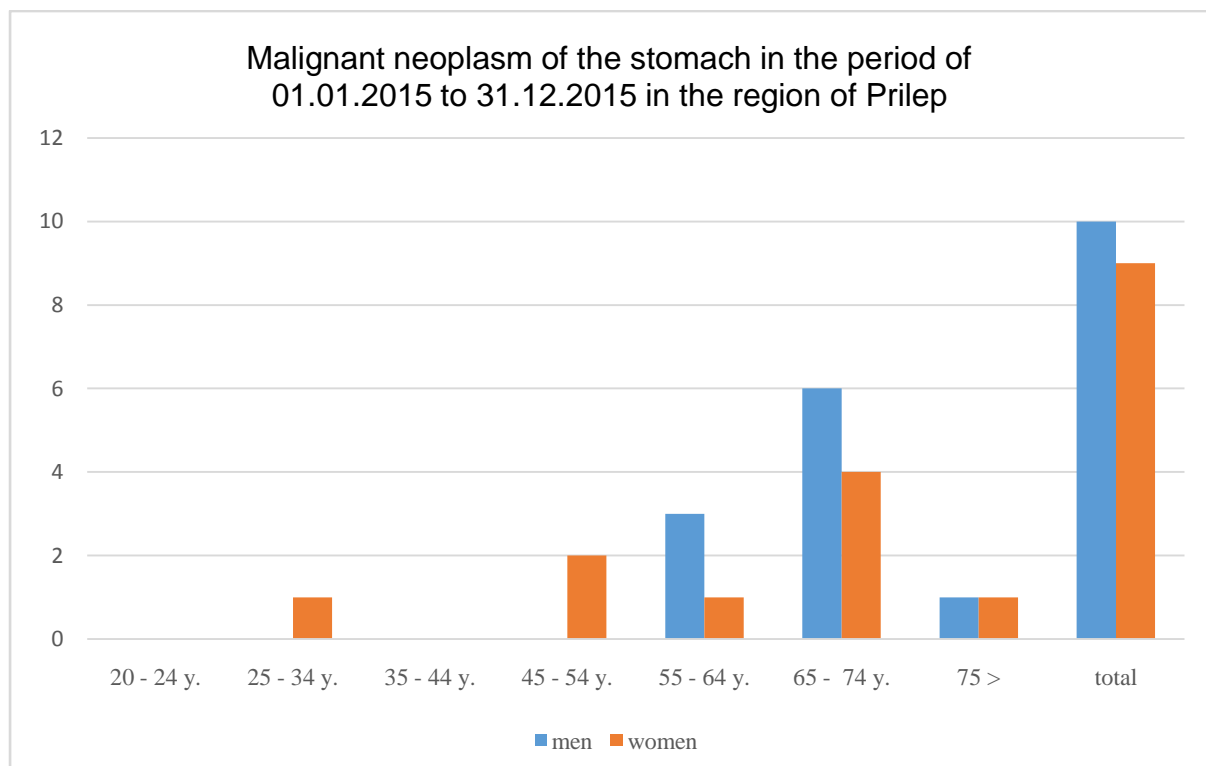
2. Material and methods

For the purposes of the research, was obtained data from the patients diagnosed with gastric cancer from the Center for Public Health “BorkaTaleski” – Prilep, Republic of Northern Macedonia in the period of 2015 to 2019 ie within 5 years.

Most attention is paid to age, gender, symptoms and treatment to eliminate or reduce symptoms.

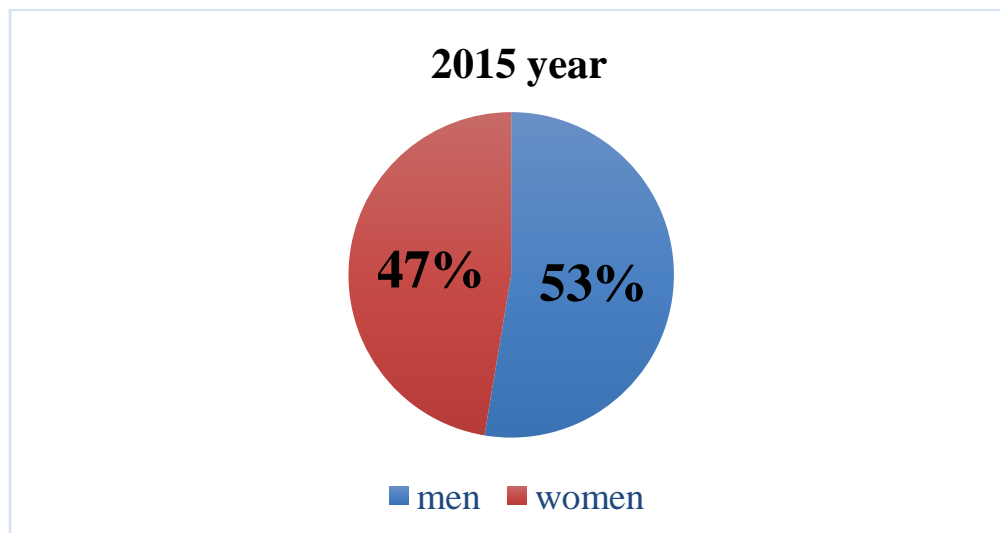
3. Results and discussions

According to this research, men are the ones who suffer more from gastric cancer and most at risk are people aged 65 to 74.

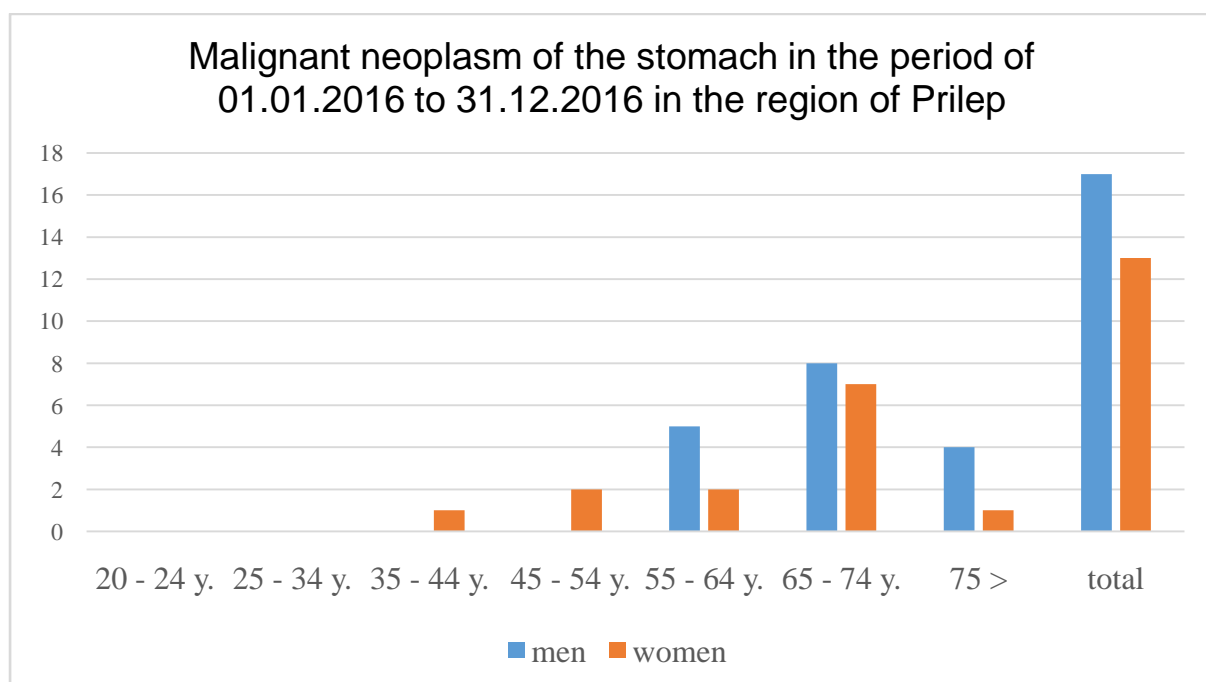


Graph 1 - Malignant neoplasm of the stomach in the period of 01.01.2015 to 31.12.2015 in the region of Prilep

According to the results in 2015, most affected people from malignant neoplasms of the stomach are aged over the age of 45. Men are more often affected than women. Most of the younger patients are women. Most risk group of citizens is the one aged 65-74.

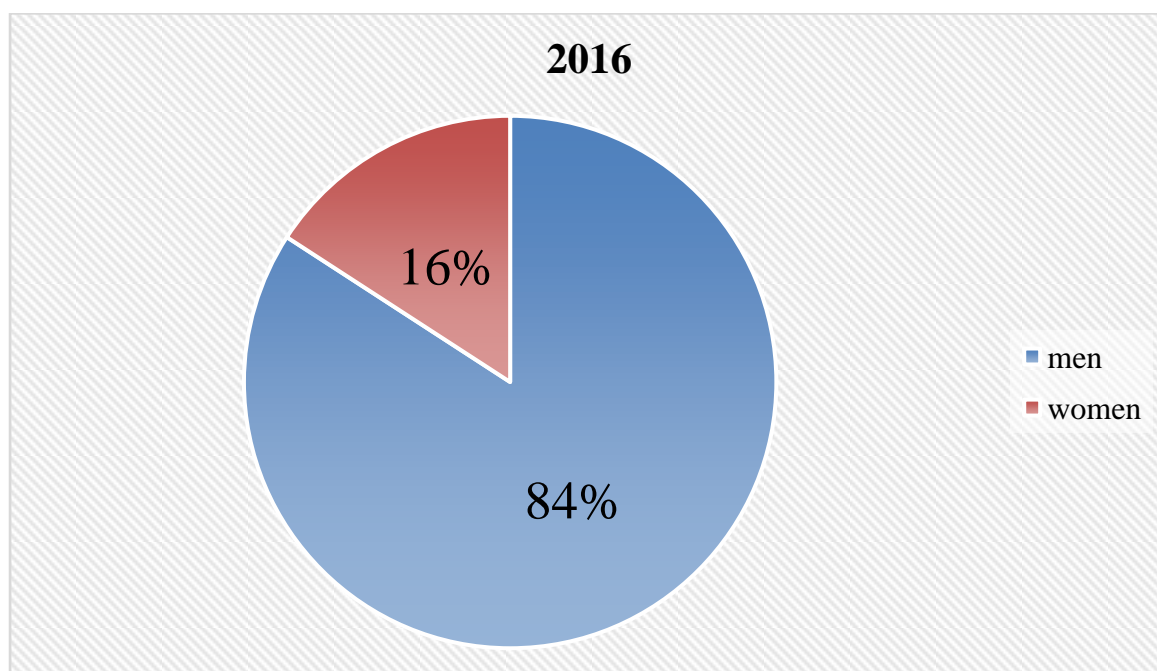


Graph 2. Gender representation

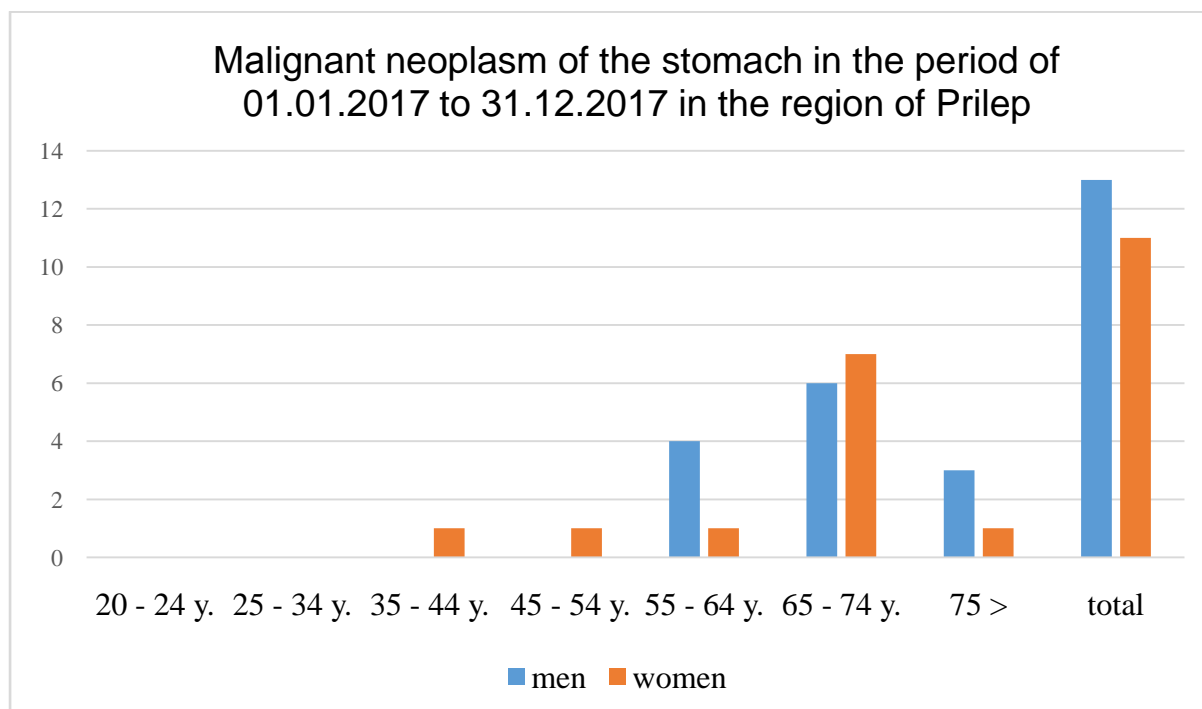


Graph 3. Malignant neoplasm of the stomach in the period of 01.01.2016 to 31.12.2016 in the region of Prilep

According to the data from the hospital "Borka Taleski" in Prilep for 2016, the same results are obtained as in 2015.

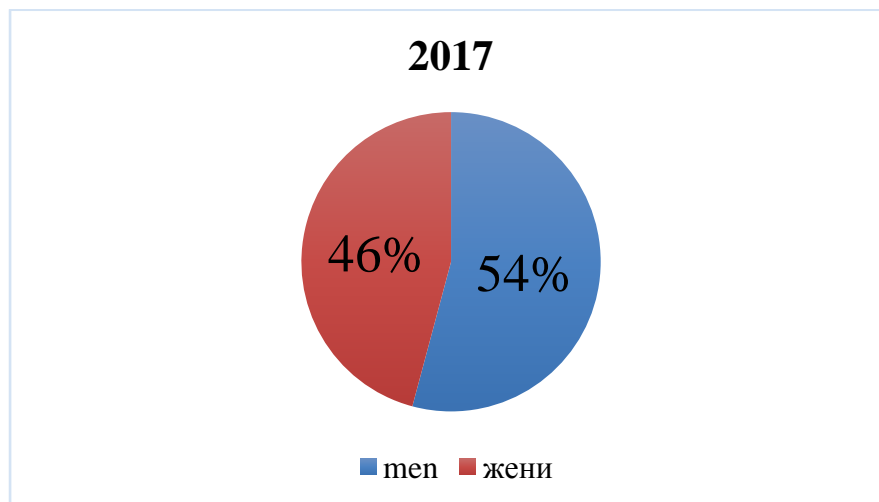


Graph 4. Gender representation

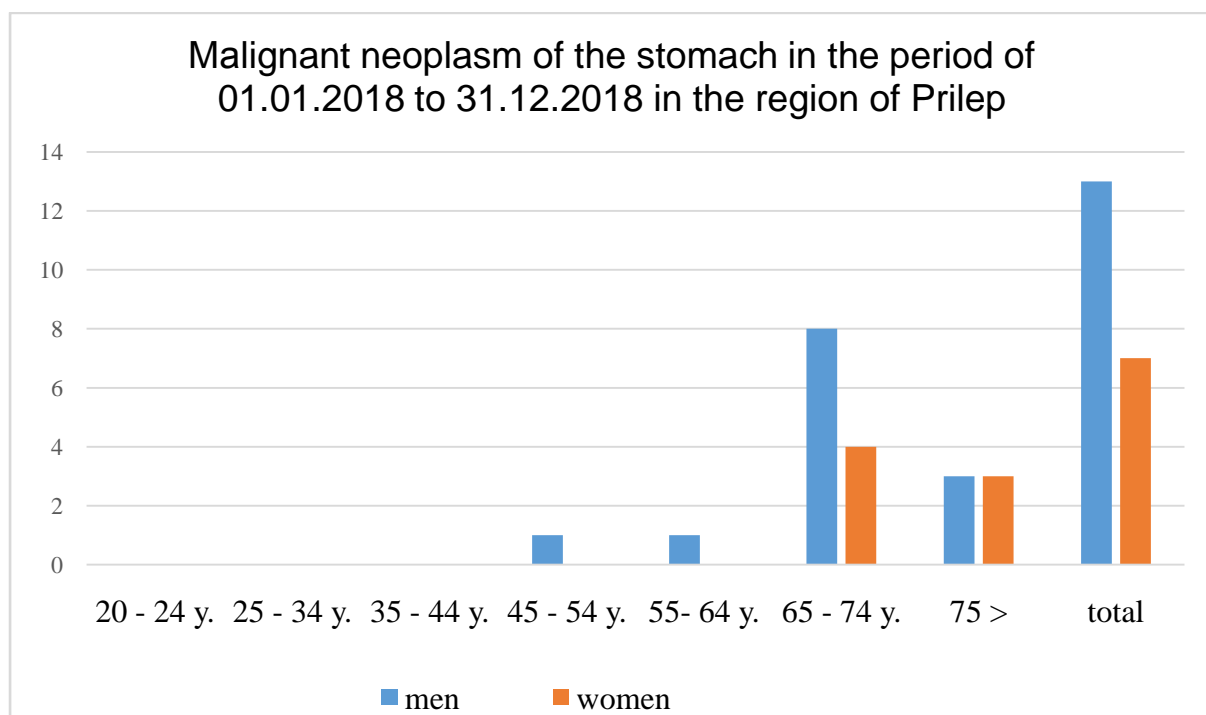


Graph 5. Malignant neoplasm of the stomach in the period of 01.01.2017 to 31.12.2017 in the region of Prilep

According to the data from the hospital "Borka Taleski" in Prilep for 2017, the results are similar as in the previous years. The total number of patients with gastric cancer is declining slightly in men and is almost constant in the female population.



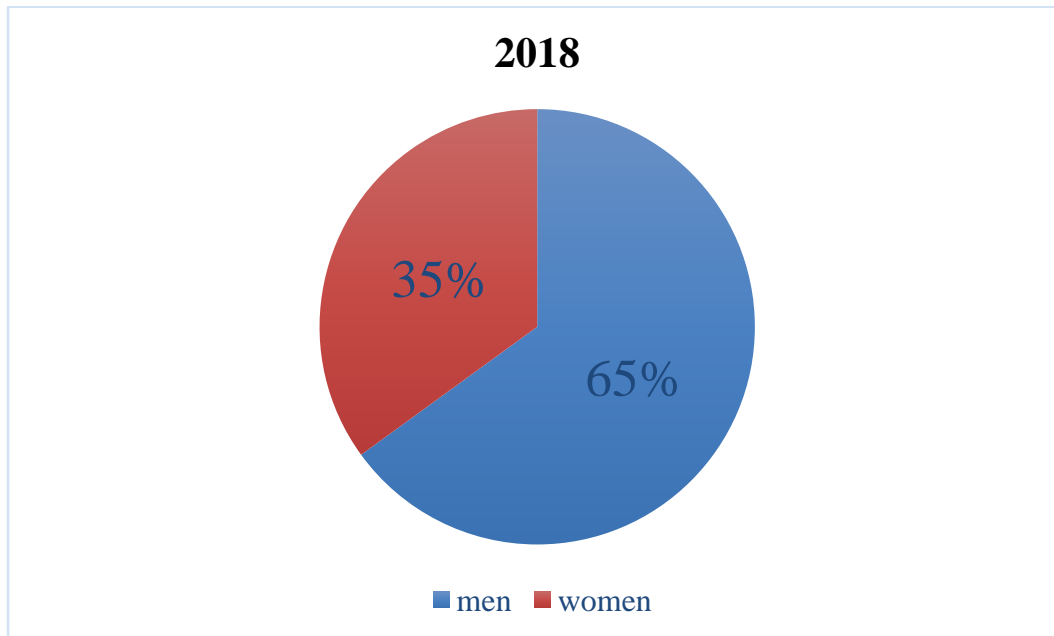
Graph 6. Gender representation



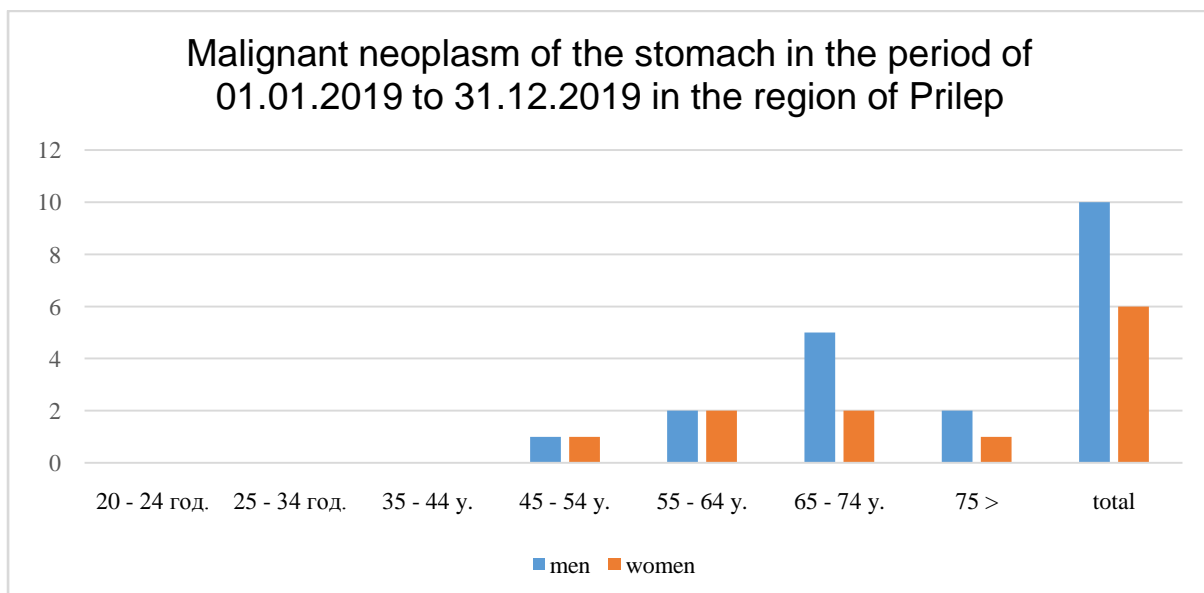
Graph 7. Malignant neoplasm of the stomach in the period of 01.01.2018 to 31.12.2018 in the region of Prilep

According to the data from the hospital "Borka Taleski" in Prilep for 2018, it can be concluded that malignant neoplasms of the stomach in younger patients most often affected

men, which is a different data from the previous years. The most risky group of citizens is the one aged 65-74. It is also seen that the total number of patients with gastric cancer is constant in the male population, and is slightly declining in the female population.

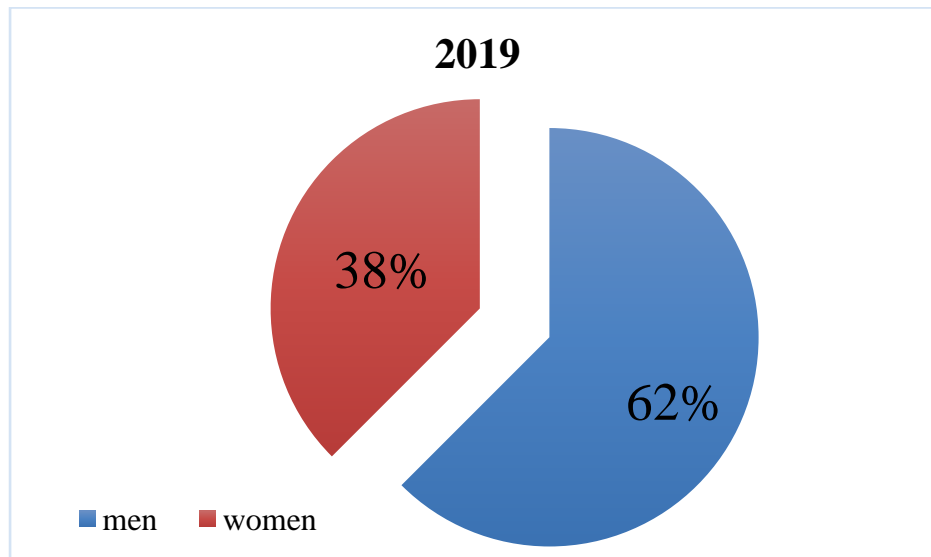


Graph 8. Gender representation

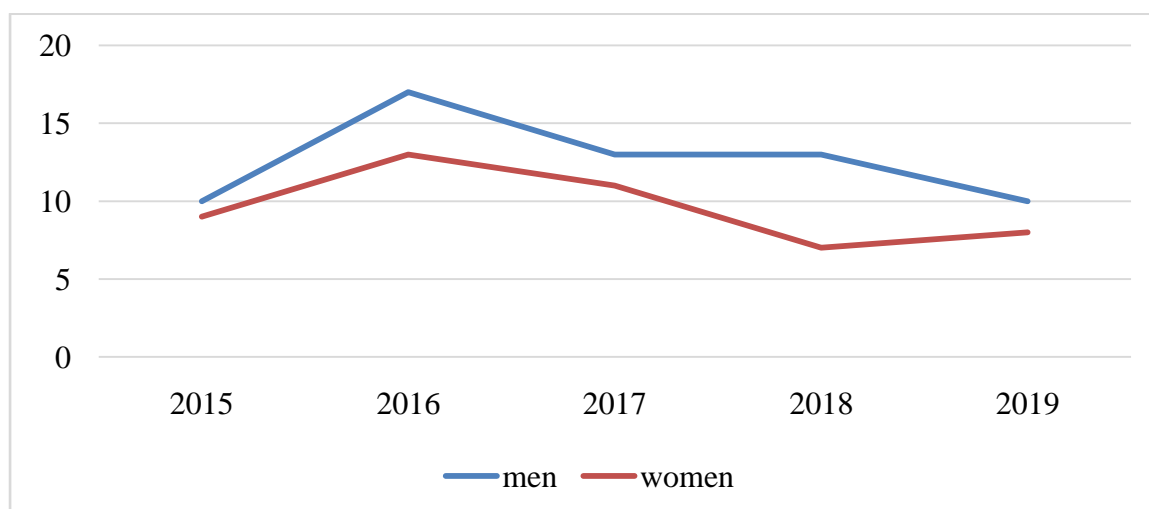


Graph 9. Malignant neoplasm of the stomach in the period of 01.01.2019 to 31.12.2019 in the region of Prilep

According to the data from the hospital "Borka Taleski" in Prilep for 2019, the results are the same as in 2015, 2016 and 2017.



Graph 10. Gender representation



Graph 11. Total number of patients

In the period from 2015 to 2019 a total of 63 men and 46 women were diagnosed with gastric cancer, but over the years it is seen that there is a slight decrease in both male and female population.

4. Conclusion

Gastric cancer is the second leading cause of death associated with cancer in the world, with a wide-ranging geographic incident. Due to the low prevalence of the disease in Macedonia, routine screening for this disease is not recommended, except in cases where there is a family history of the disease.

According to the results in 2015, the presence of gastric cancer in men is bigger ie 53% than women - 47%. For 2016 the presence of gastric cancer in men is bigger ie 82% than women - 18%. For 2017 it is seen that the statistical results for patients with malignant neoplasm of the stomach are nearly same with previous two years without any major changes. The presence in men is 80% and in women is 20%. For 2018, the presence of gastric cancer in men is 65% and in women is 35%. For 2019 the presence of malignant neoplasm in men is 62% and in women is 38%.

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