

**Marek Tomaszewski^{1,2}, Ewelina Kędra³, Grażyna Olchowik^{2,4},
Monika Tomaszewska⁵, Marcin Mandryk³**

¹Department of Human Anatomy, Medical University of Lublin

¹Katedra i Zakład Anatomii Prawidłowej Człowieka UM w Lublinie

²John Paul II State School of Higher Education in Biała Podlaska

²Państwowa Szkoła Wyższa im. Papieża Jana Pawła II w Białej Podlaskiej, Instytut Zdrowia

³School of Social Sciences in Lublin

³Wyższa Szkoła Nauk Społecznych w Lublinie

⁴Department of Biophysics, Medical University of Lublin

⁴Zakład Biofizyki UM w Lublinie

⁵I Department of Radiology, Medical University of Lublin

⁵I Zakład Radiologii Lekarskiej UM w Lublinie

Gastric and duodenal ulcers, and human consciousness

Choroba wrzodowa żołądka i dwunastnicy, a świadomość człowieka

Summary

Chronic peptic ulcer disease is a cyclic appearance of peptic ulcers in the stomach or duodenum. Its prevalence is estimated at 5-10% of the adult population. Among the most common causes include infection of *Helicobacter pylori* and the use of non-steroidal anti-inflammatory drugs (NSAIDs). The article presents the results of a survey tool for the assessment of diet and eating habits that may influence the development of gastric ulcer or duodenal ulcers.

Keywords: peptic ulcer, gastric ulcer, duodenal ulcer, *Helicobacter pylori*, NSAIDs

Streszczenie

Choroba wrzodowa jest cyklicznym pojawieniem się wrzodów trawiennych w żołądku lub dwunastnicy. Jej chorobowość oszacowano na 5-10% dorosłej populacji. Wśród najczęstszych jej przyczyn wymienia się zakażenie *Helicobacter pylori* oraz stosowanie niesteroidowych leków przeciwzapalnych (NSAIDs). Artykuł przedstawia wyniki sondażu diagnostycznego dotyczącego oceny sposobu odżywiania oraz nawyków żywieniowych, które mogą wpłynąć na rozwój choroby wrzodowej żołądka lub dwunastnicy.

Słowa kluczowe: choroba wrzodowa, wrzód żołądka, wrzód dwunastnicy, *Helicobacter pylori*, NSAIDs.

Introduction

Peptic ulcer disease is a cyclic appearance of peptic ulcers in the stomach or duodenum (spring and / or autumn). The term peptic ulcer is called a loss in the mucosa, accompanied by inflammatory infiltration and necrosis of blood clots in the environment (Szczeklik and Gajewski, 2011).

Peptic ulcers occur in the gastrointestinal tract, where the mucous membrane is in direct contact with hydrochloric acid and pepsin (duodenum bulb, stomach) (Talley, 1999).

Peptic and duodenal ulcer is the most common gastrointestinal disorders, where the prevalence is estimated at 5-10% of the adult population. Among the most common causes include infection with *Helicobacter pylori* (*H. pylori*) and the use of non-steroidal anti-inflammatory drugs (NSAIDs). Physiological stress in terms of the Intensive Care, Zollinger-Ellison syndrome, Crohn's disease, glucocorticoids (in combination with NSAIDs), systemic mastocytosis, carcinoid syndrome, basophilia in myeloproliferative syndromes, infection, HSV and CMV virus, radiation, chemotherapy (fluorouracil) sarcoidosis are less frequent causes of onset of ulcers. The factors contributing to the healing of the ulcer as well as increasing the risk of recurrence include smoking, blood type "0" (Lewis b antigen to the adherence of *H. pylori*), alcohol, nutrition, stress and other psychological factors. The risk of mucosal damage by NSAIDs increase: age > 60 r.ż., a history of peptic ulcer or bleeding ulcer, other serious diseases, concomitant use of several NSAIDs or high-dose glucocorticoid therapy and or anticoagulants (Dixon, 1996; EHPSG, 2002; Dzieniszewski, 2004).

The main symptom of the presence of peptic ulcers is the pain or discomfort in the upper abdomen, occurring within 1-3 hours after a meal and retiring after ingestion of food or acceptance of antacids. Quite often the pain occurs at night or early in the morning (Talley, 1999, Dixon, 1996; EHPSG, 2002; Dzieniszewski, 2004).

The study confirms the changes in the appearance of gastric / duodenal endoscopy, a test detecting *H. pylori* are invasive methods (urease test, histological examination, cell culture) and non-invasive (breathing tests, serological tests, test for the detection of *H. pylori* antigen in stool) (Dixon, 1996; EHPSG, 2002; Dzieniszewski, 2004).

Treatment of peptic ulcers is primarily on eliminating the symptoms and triggers when there is evidence-eradication of *H. pylori* (now proposes to triple combination therapy over 7 days) (Dixon, 1996; EHPSG, 2002; Dzieniszewski, 2004).

Material and methods

The paper used the method of diagnostic survey, engineering study was to survey and tool-interview by questionnaires, the questionnaire.

The study included 100 randomly selected patients who are public health care center in Lublin. Respondents agreed to participate in surveys conducted.

Sheet survey consisted of 43 questions concerning the evaluation of diet and eating habits that can affect the development of ulcers in the stomach or duodenum.

Results

Of the 100 respondents 66% were women and 34% men, 81% of which are under 30 years old, 16% aged 30-50 years old, and 3% were over 50 years old (Fig. 1).

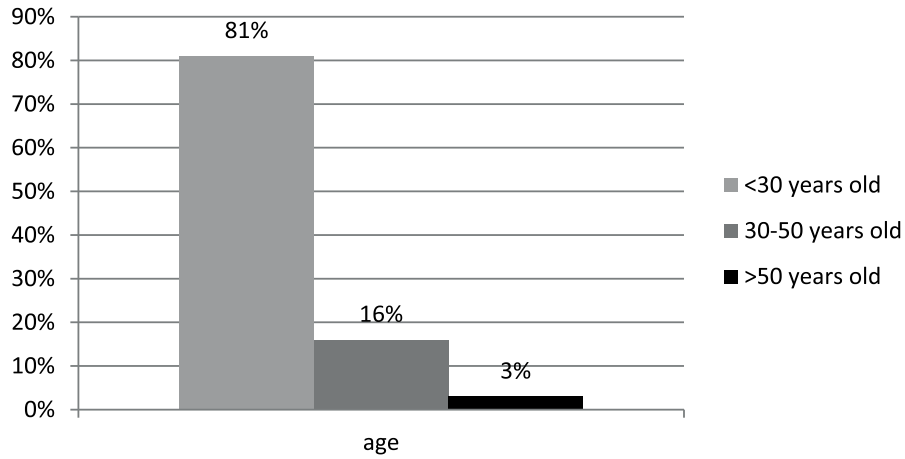


Fig. 1. Percentage distribution of respondents according to age.

Blood type for 26% percent of the respondents are not known, 21% have blood group A, 20% of blood group O, 17% of blood type AB, and 16% of the blood group B (Fig. 2).

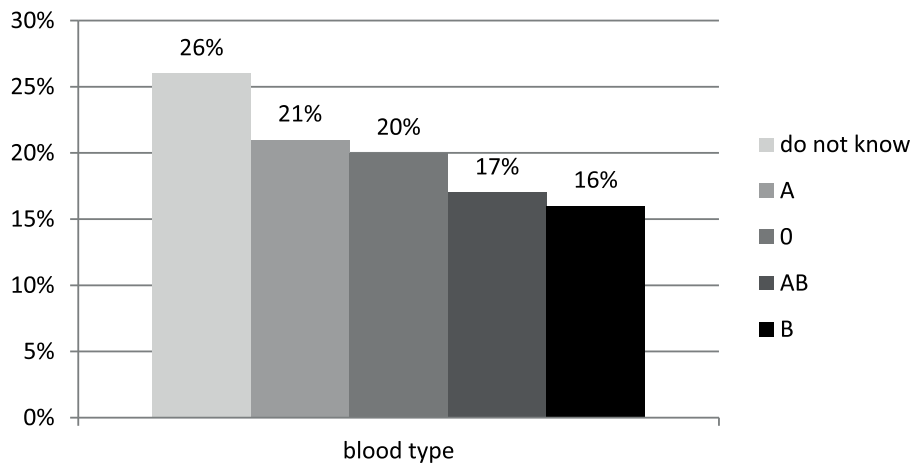


Fig. 2. Percentage distribution of respondents according to blood group.

The survey shows that 58% of respondents do not smoke tobacco, and 42% said they smoke. Among those who smoke 36% - burns 5-10 cigarettes per day, 33% - burns under five, 23% burns 10-20, and 20 cigarettes burns over 8% of respondents (Fig. 3).

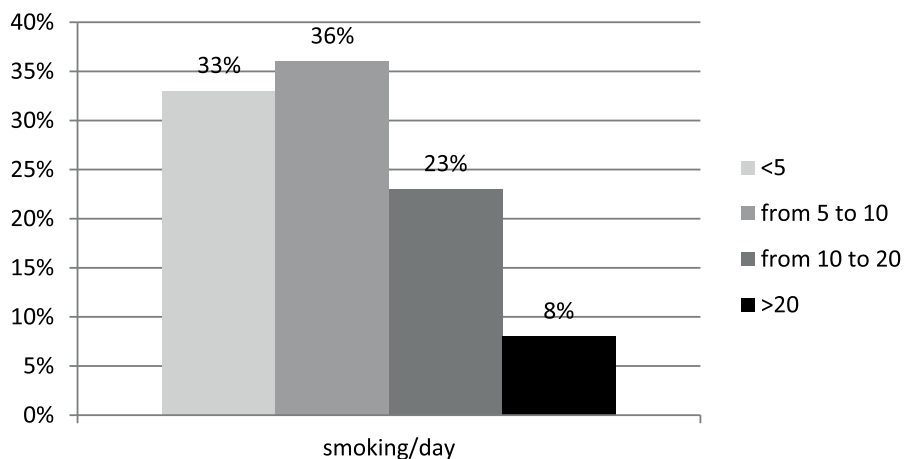


Fig. 3. The percentage number of cigarettes smoked by the respondents.

The largest group of respondents 42% said that the smoke from five to 10 years, 23% 3-5 years 14% longer (15-30 years), 13% 1-2 years, and less than a year consumes 8% (Fig. 4).

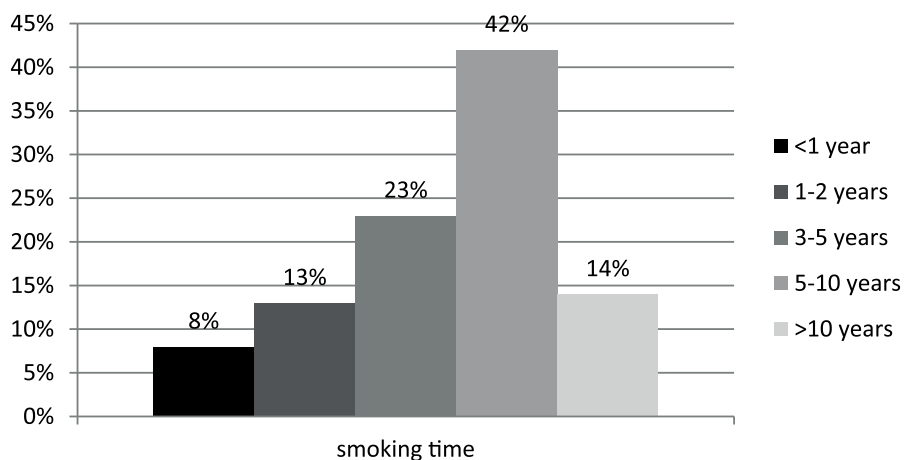


Fig. 4. The proportion of the length of cigarette smoking among respondents.

Only 1% of respondents did not drink beverages containing in its composition methylxanthine, 99% answered “yes” to this question.

The study shows that the majority- 37% of drinks one cup of coffee per day, 32% of drinks 2-3 cups of coffee, 29% do not drink coffee at all, and 2% of respondents drinks 4-5 cups of coffee per day (Fig. 5).

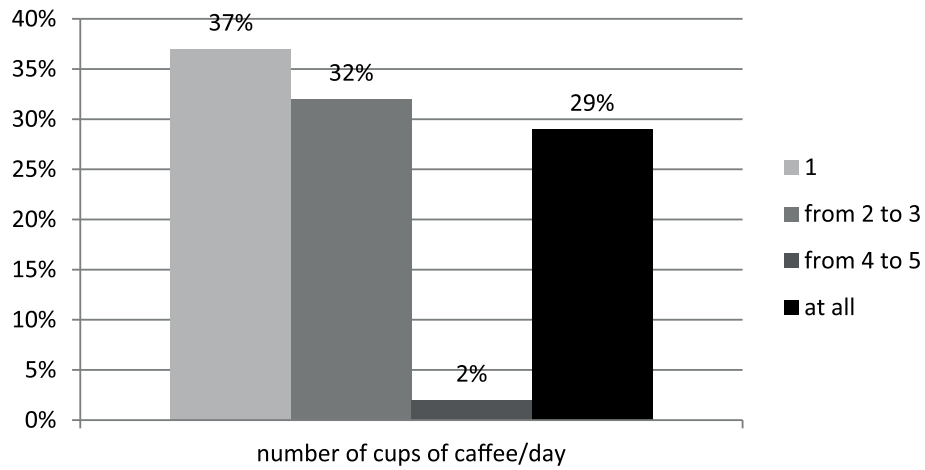


Fig. 5. The quantities of coffee drunk daily by respondents.

Among those surveyed, almost half as much as 49% 2-3 drinks tea daily, 1 tea drinks 33%, 11% 4-5 teas, and 7% do not drink at all (Fig. 6).

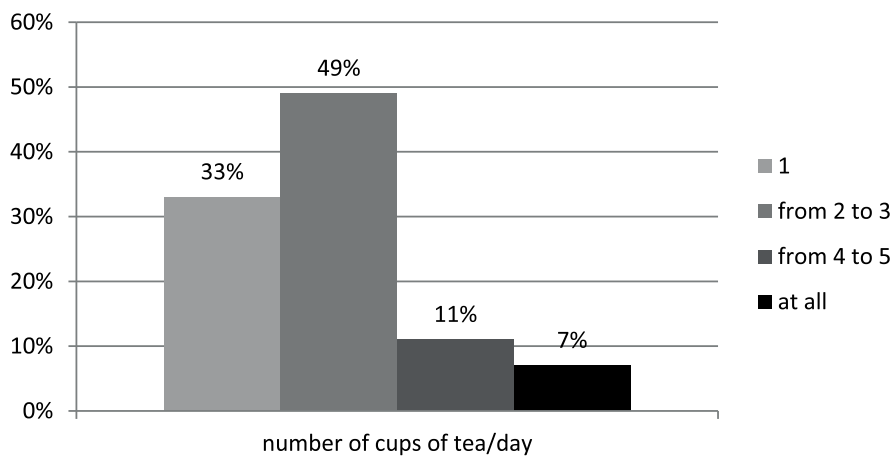


Fig. 6. The quantities of tea drunk daily by the respondents.

Frequency of alcohol consumption was as follows: once a week- 42% of the respondents, 2-3 times a month (26%), less 18%, and once a month- 14% (Fig. 7).

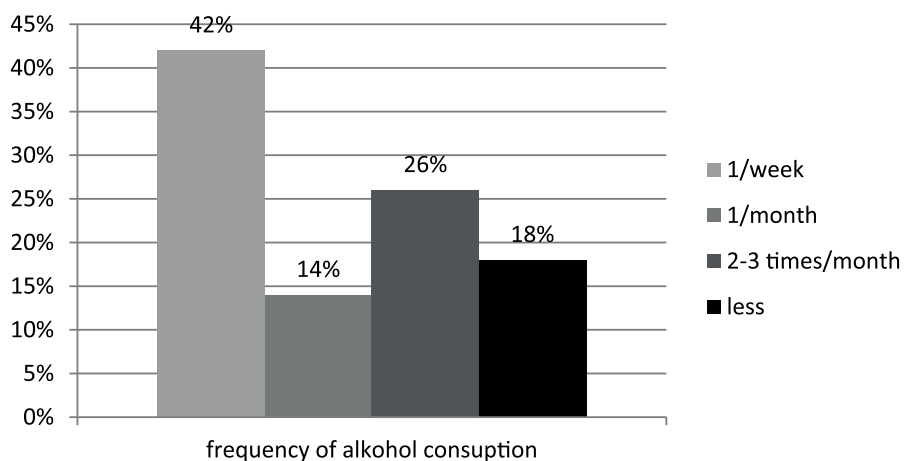


Fig. 7. Percentage distribution of the frequency of alcohol consumption among the respondents.

Most respondents reach for beer (51%), less the wine (24%) and vodka consumed 23% of respondents from other spirits: whiskey- 2% (Fig. 8).

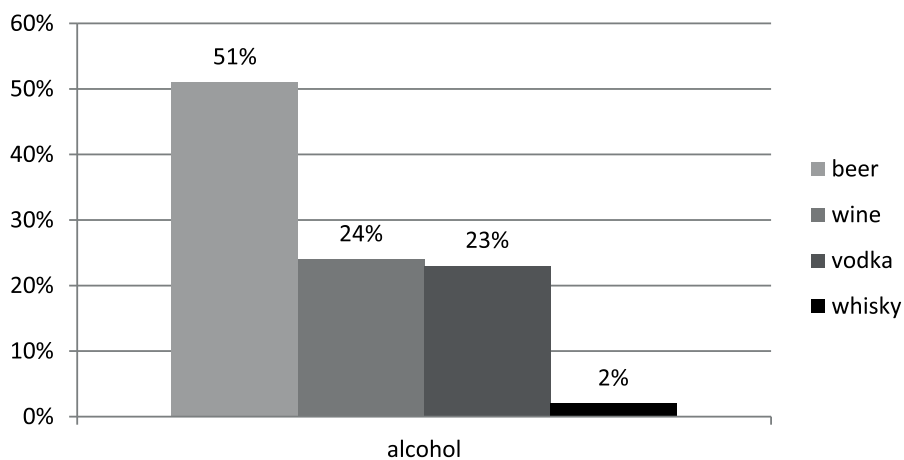


Fig. 8. Percentage distribution of alcohol type consumed by respondents.

In the open questions about the amount of food spirits, wine and beer respondents mainly indicated 0.02-0.5 liters of spirits (65%), 200ml- 1L wine (51%), 1-10 pack of beer (82%).

Frequency of eating spicy foods among the respondents is as follows: 31% consumed 1-2 times a week, 28% once a month, 23% do not use hot spices, and 18%- every day (Fig. 9)

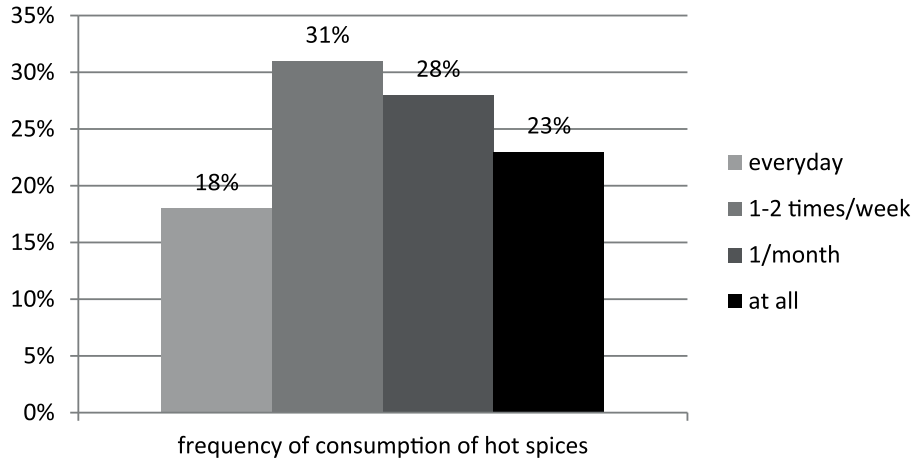


Fig. 9. Percentage distribution of frequency of consumption of spicy foods.

In 52% of physical work and 48% mental.

More than half of the respondents as much as 61% in the last time it was under heavy stress, while for 39% of major stressful stimuli were studied and related exams, surgery, family problems, as well as the death of a loved one.

Most of the respondents (72%) uses drugs from non-steroidal anti-inflammatory group (NSAIDs), with the following frequency: once a month- 81%, once a week- 14%, 2-3 times a week- 4%, and more- 1% (Fig. 10).

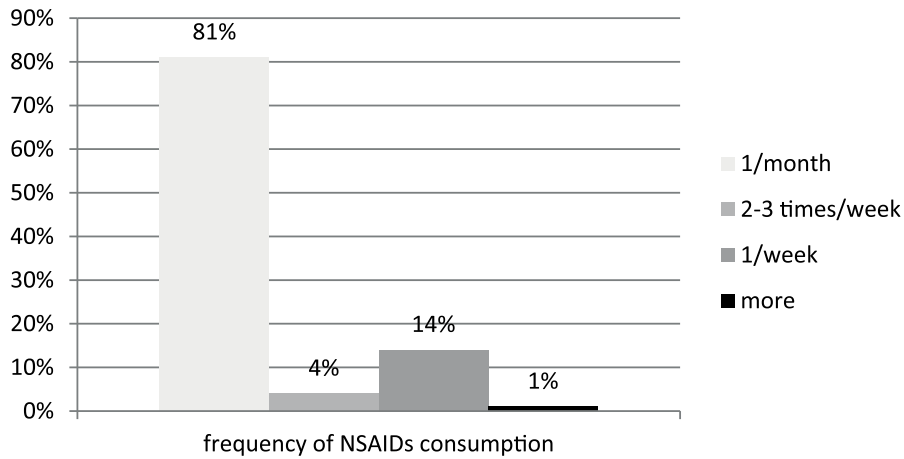


Fig. 10. Percentage distribution of frequency of NSAIDs consumption.

The most commonly used NSAIDs are ketoprofen, 54% of respondents have indicated that response, 41% used other of the above, including Ibuprofen, Naproxen, Nurofen, 3% used indometacin, and 2% piroxicam (Fig. 11).

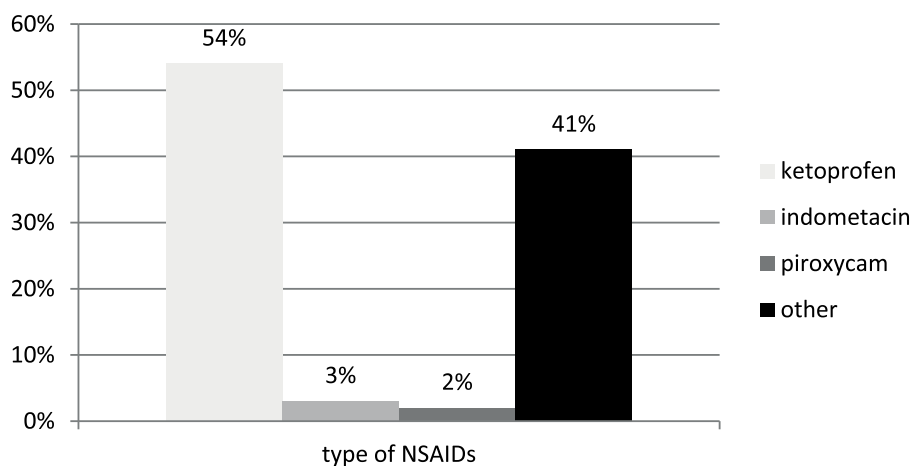


Fig. 11. Percentage distribution of NSAIDs type consumed by respondents.

Respondents asked about the use of corticosteroids negatively answers in 89%. Among the respondents, 89% did not consume NSAIDs in combination with corticosteroids (CCS), 1% usually combine (Fig. 12).

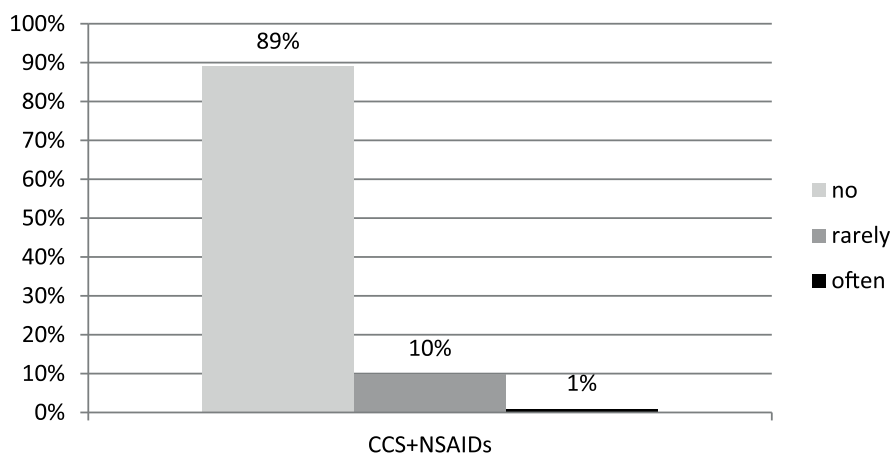


Fig. 12. Percentage distribution of the respondents taking NSAIDs with corticosteroids (CCS).

More than half of the respondents (60%) do not eat meals at regular times and tranquility, while 40% confirmed the regularity of meals. Respondents asked about the number of meals answered as follows: 4-5 meals consumed 47%, 41% 3 meals and 1-2 meals consumed 12% of the respondents (Fig. 13).

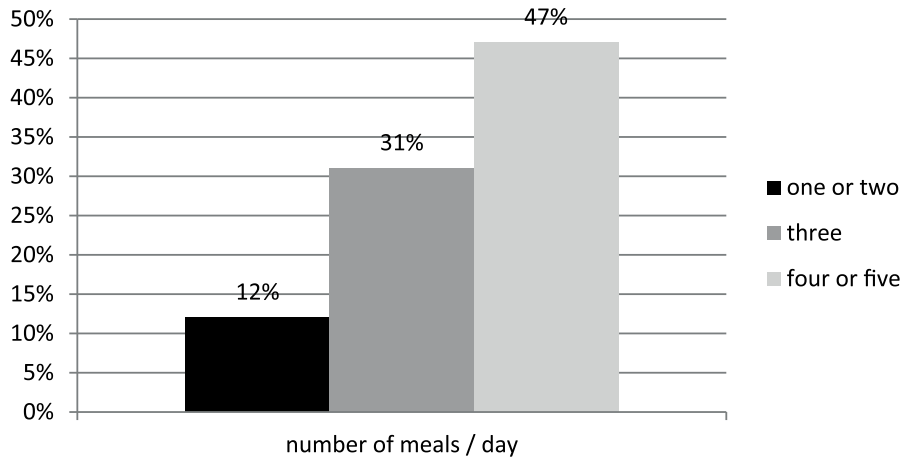


Fig. 13. Percentage distribution of number of meals consumed by respondents.

Among the culinary ways prevails cooking- 37%, then frying- 33%, baking- 21%, grilling- 7% and constriction- 2% (Fig. 14).

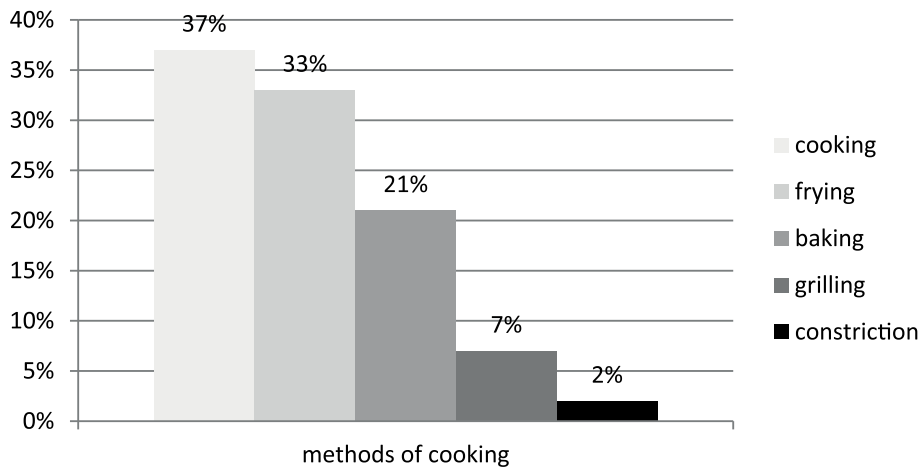


Fig. 14. Percentage distribution of cooking methods used by respondents.

Respondents asked about eating a “Fast Food” responded as follows: 2-3 times a month (45%), 2-3 times a year (33%), not eat this type of food (13%), 2-3 a week (8%) and 1% consumed daily (Fig. 16).

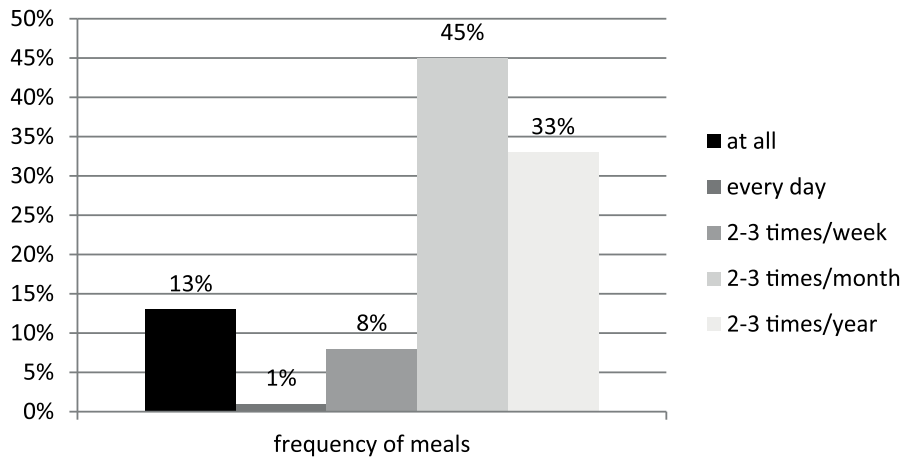


Fig. 16. Percentage distribution of frequency of eating a “Fast Food” by the respondents.

In 7% of patients have chronic peptic ulcer disease and 93% of the respondents negate this disease (Fig. 17).

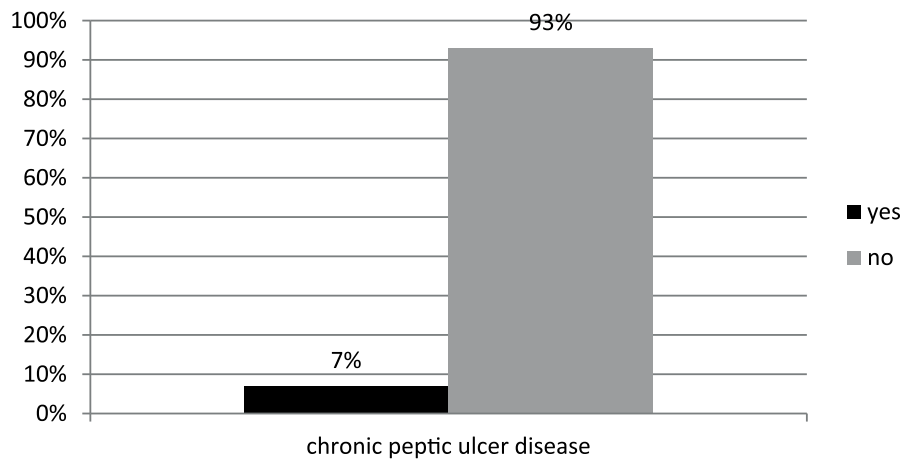


Fig. 17. Percentage distribution of frequency of chronic peptic ulcer disease.

Interview in the presence of gastric or duodenal ulcer was as follows: 93% negates, 5%-but confirmed a long time ago, and in 2% of respondents ulcer occurred recently (Fig. 18).

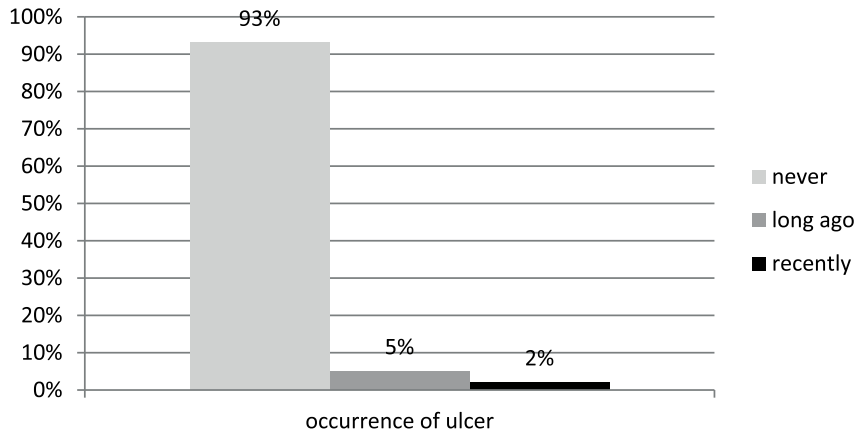


Fig. 18. Percentage distribution of respondents who there was or there was not experienced gastric/duodenal ulcer.

Another question concerned the possible occurrence of symptoms related to the occurrence of ulcers of the stomach or duodenum. These symptoms include: abdominal pain at night or on an empty stomach (23% of respondents confirmed), abdominal pain 1-3h after a meal (20% of respondents confirmed), abdominal pain retiring after eating antacids (8% of the respondents confirmed), with other people (49%), there were none of the symptoms (Fig. 19).

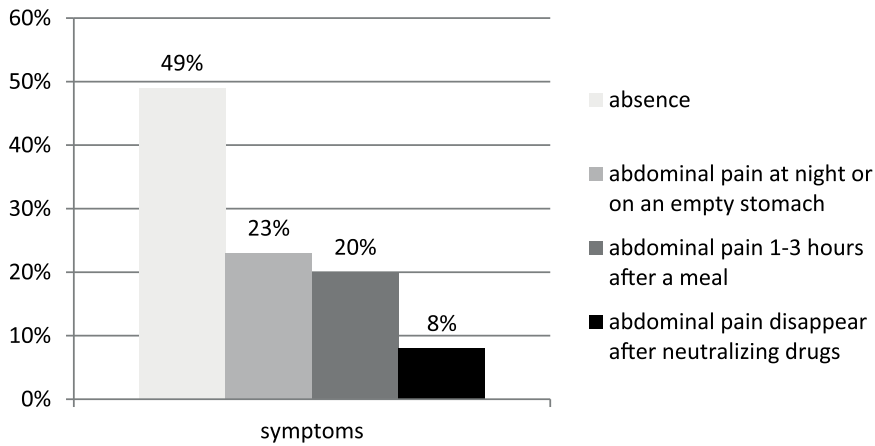


Fig. 19. Percentage distribution of respondents who experienced symptoms associated with chronic peptic ulcer disease.

Among the 81% of respondents disregarded tests for *Helicobacter pylori*. 19% of respondents made diagnostic tests on *Helicobacter pylori*: urease test (49%), histological examination from the antrum (23%), serological tests (17%), a test to detect *H. pylori* antigen in stool (5%), cell culture (1%), breathing tests (5%) (Fig. 20).

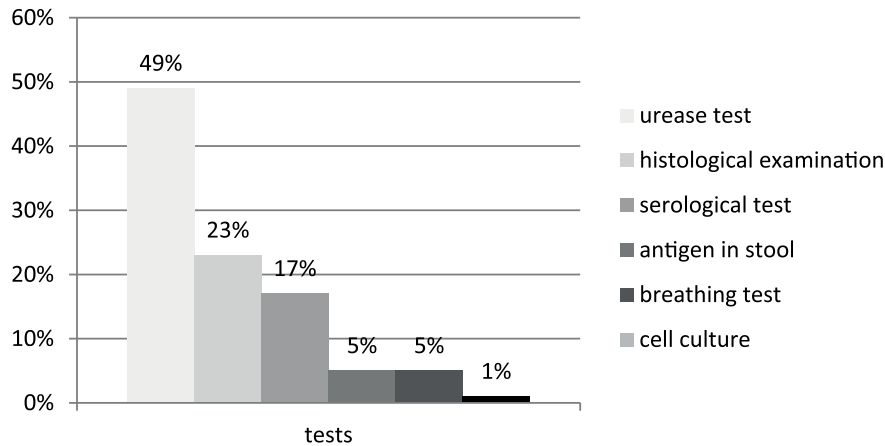


Fig. 20. Percentage of tests performed on *Helicobacter pylori*.

Conclusion

Analysis of these responses indicates that you should educate patients about the effects of various factors on the development of gastrointestinal diseases, especially gastric ulcer or duodenal ulcers. Awareness of the risks associated with an unhealthy lifestyle is very important, because the genetic predisposition is only a small part of the contribution to the development of disease. To a large extent, our health depends on factors that can modify themselves as: the nature of work, physical activity, ways to cope with stress or diet. Despite this false behavior patterns significantly remolded in human nature. Today, many people live in high stress and pace, regardless of the quality of products consumed. Most meals are "Fast Food" supplemented with plenty of painkillers and drunk the same amount of alcohol. And we are responsible for our lives yet.

Bibliography

1. Dixon M.F., Genta R.M., Yardley J.H. et al. (1996). Classification and trading of gastritis: the update Sydney System: International Workshop on the Histopathology of Gastritis 1994. *Am J SurgPathol.* 20, 1161-1181
2. Dzieniszewski J., Jarosz M. i Grupa Robocza PTG. (2004). Postępowanie w zakażeniu *Helicobacter pylori* (rok 2004). Wytyczne opracowane przez Grupę Roboczą Polskiego Towarzystwa Gastroenterologii. *Gastroenterol Pol.* 11, 41-48
3. European *Helicobacter Pylori* Study Group (EHPSG): Current concepts in the management of *Helicobacter pylori* infection- the Maastricht 2-2000 Consensus Report *Aliment PharmacolTher.* (2002), 16, 167-180
4. Szczeklik A., Gajewski P. (2011). *Choroby wewnętrzne. Medycyna Praktyczna, Kraków*
5. Talley. N.J., Stanghellini V., Heading R.C., et al. (1999). Functional gastroduodenal disorders. *Gut.* 45, supl. II, II37-II42