

## Research Article

# Evaluation of general practitioners' awareness of the diagnosis and treatment of *Helicobacter pylori* in Yasuj 2017

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## ABSTRACT

**Introduction:** The recognition of general physicians from *Helicobacter pylori* and its accompaniment with gastric ulcer has changed the natural course of the disease, so that the eradication of this bacterium in recent years has significantly reduced the recurrence of the wound and its complications. The aim of this cross-sectional study was to assess the level of knowledge of general physicians in the city of Yasuj in the diagnosis and treatment of *Helicobacter pylori* in 2017.

**Methods:** In this cross-sectional study, 113 general practitioners in Yasuj city were evaluated by a questionnaire including seven diagnostic questions and seven therapeutic questions. The results were analyzed using SPSS software version 22 and Chi-square, Analysis of variance (ANOVA) was analyzed.  $P < 0.05$  was considered as a significant degree.

**Results:** The results of this study showed that 104 out of 113 general practitioners in Yasuj had collaborators. Comparison of the final status of general practitioners' knowledge about diagnostic and therapeutic isolates was 43.1% (44) poor, 53.4% (55) patients were moderate and 3.4% (4) people were good, while questions 74.1% (77) people were weak, 25.9% (27 people) were moderate and 0% (0) people were good.

**Conclusion:** Since *Helicobacter pylori* infection is common in Iran, general practitioner functions are directly influenced by the knowledge necessary to increase the level and quality of information among general practitioners. Therefore, the level of awareness and attitude should be increased through continuing education programs and continuing medical education, as well as medical seminars and conferences of general practitioners.

**Key words:** Diagnosis, Treatment, *Helicobacter pylori*, General practitioner

## INTRODUCTION

*Helicobacter pylorus* is a spiral and gram negative bacterium. This bacterium is the most common chronic bacterial infection that occurs in all parts

of the world and in all ages, and affects about half the world's population. In developing countries, the infection occurs at an earlier age. Its

complications are duodenal ulcers, gastrointestinal malignancies and acute and chronic gastritis (1).

This bacterium is said to cause a stomach ulcer due to the formation of metastable gastric mucus, which is due to gastric mucosal inflammation and the reduction of parietal and hypochlorhydric stomach acid. Other bacteria are present, and this by converting nitrate to nitrite and nitrosamines, carcinogens can provide gastric malignancies (2, 3).

The rate of colonization is higher in people who have poor health conditions. In developing countries (such as Iran), up to the age of 10, 70% of people and, by the age of 20, all are colonized with this bacterium (4). The rapid and definitive diagnosis of bacteria leads to successful treatment of patients with antibiotics. Direct methods are gastric tissue sampling (biopsy) and include gastric pathology, culture, urease and PCR pathology. In indirect methods, respiratory urease tests, serologic tests and antigenic searches the bacteria are used in ELISA (5).

Several drugs have been evaluated to treat *Helicobacter pylori* infection and no drug alone has been effective in treating this microorganism. (6).

What is considered appropriate for the treatment of *Helicobacter pylori* is the three-fold treatment of metronidazole, tetracycline and bismuth, which is not very costly, but has a series of side effects such as oral metallic taste due to metronidazole consumption and increased sensitivity to light due to consumption Tetracycline and other complications such as gray-colored intermittent oral and dental pains, constipation, diarrhea and stool colonization (7).

Considering the importance and extent of infection and complications of *Helicobacter Pylori* and the involvement of various medical groups, especially general practitioners, in the treatment of these patients, which in many cases are incomplete (8), the level of knowledge and recognition of the physician is undesirable or incomplete Resulting in longer illness and additional costs and pathogenicity and complications. Therefore, it is necessary that the

level of general practitioners' knowledge about the diagnosis and treatment of this disease be sufficient. Unfortunately, today most patients with *Hpylory* (IgG) positive, started to be treated by general practitioners and followed up by these patients these tests are used and patients incur additional costs.

This study is a cross-sectional study that examines the level of knowledge of general practitioners in Yasuj in relation to the *Helicobacter pylori* diagnostic and therapeutic approach in 2017.

### MATERIALS AND METHODS:

This study included 113 general practitioners working in public and private clinics and Yasuj medical centers in 2017. The present study was carried out to determine the prevalence of the disease. Sample size was measured based on the formulas of observational studies and matching with Morgan table. According to the number of (160) general practitioners working in clinics and medical centers of Yasuj, the required sample size was 113 according to the following formula. Sampling was done by random categorization. Those who answered less than 20 percent of the questions and were not willing to cooperate at the time of visit, as well as the lack of timely response time, were excluded.

$$\frac{x_1^2 - \alpha NP(1 - P)}{d^2(N - 1) + x_1^2 - \alpha P(1 - P)}$$

### Data collection methods

To collect data, a researcher-made questionnaire, which included two parts of the diagnostic and treatment questionnaire, was used to measure general practitioner's knowledge. Validity and reliability of this questionnaire were obtained through pilot samples based on internal correlation coefficients and its validity by calculating Kappa coefficients and Krone Bach alpha coefficients.

### FINDINGS:

This cross-sectional study was performed on 113 general practitioners aged 27 to 56 years old in public and private clinics in Yasuj. Out of these samples, nine general practitioners were excluded

from the questionnaire due to lack of response to the questionnaire and the lack of timely response time to the questions. The sample size was 104 general practitioners at the end of the sampling.

The average percentage of correct answer to the diagnostic questions was 43.1% (44 people) poor, 53.4% (55 patients) were moderate and 3.4% (4 people) were good and in response to treatment, 74.1% (77 patients) were weak, 25.9% (27 patients) were moderate and 0% Good.

Experience, 65.5% (history from 0 to 10 years), 25.9% (history from 11 to 20 years), 8.6% (history from 21 to 30 years).

The retraining period was 6.9% (7 had open-minded), 93.1% (97 had no open-schooling).

University Hospital, 96.6% (99 people at state university) 3.4% (4 students).

The graduation date of the doctor, 51.7% (54 graduated between 1996-96), 31.4% (32 graduates between the years of 89-80), 17.2% (18 graduated between the years 79-70).

Based on the age of the doctor, 60.3% (under 35 years of age), 22.4% (35 to 45%), 17.2% (over 45 years).

Physician employment status, 67.2% (69 public), 24.1% (25 private), 8.6% (9 nongovernmental and private).

#### **DISCUSSION AND CONCLUSION:**

Despite the high prevalence of *Helicobacter pylori* infection, about 10% of people are infected with the complications of the infection, and the rest of the people who have this infection do not need this treatment. But, unfortunately, it is a matter of great concern. In our society, the test and treatment is done in patients with or without gastrointestinal symptoms. In addition, in many cases, the appropriate dose of the drug and the duration of the drug are not observed and lead to the creation of resistant strains of *Helicobacter* and its development in the community. On the other hand, due to the widespread use of mass media and false beliefs in the community, and the concerns about the need for treatment, to the detriment of serological tests without consideration of the time factor, costs a lot to

society and government. Regarding the widespread problem of awareness and correctness of the problem and the recognition of *Helicobacter pylori*, it is necessary to correct the cultural process in society. Therefore, the aim of this study was to determine the level of awareness of general practitioners in Yasuj in the detection and treatment of *Helicobacter Pylori* in 2017.

The results of this study showed that the main source of information for general practitioners was the resources of the period of study. In the Ahmed study, medical journals were the source of information for 32% of general practitioners (11). While the Canbaz study in Turkey was the main source of information for general practitioners supporting drug companies from the Symposium (10).

The results of this study showed that 4.3% (good knowledge) and 53.4% (moderate awareness) of general practitioners had a level of knowledge about *Helicobacter pylori* detection, while knowledge about *Helicobacter pylori* treatment was good knowledge and 25.9% had moderate awareness they had.

In a study by Ghanaei et al., 26.7% of general practitioners were aware of *H. pylori*'s role in peptic ulcers (27%) and Moghaddam.D (41.5%) of general practitioners in the diagnosis of *H. pylori*. They knew (12). The level of knowledge in the present study was less than similar studies. However, the available data indicates the physicians' weakness and confusion about the pathological role of *Helicobacter pylori* infection. And the lack of a training course can be attributed to this.

In the present study, there is no significant relationship between the age of general practitioners, the history of activity and the duration of occupational medicine with the *Helicobacter pylori* diagnostic and therapeutic units. These results are consistent with the results of Ghanaei et alin 2011 in Gilanprovince in relation to approaches Diagnosis and treatment of general practitioners (9).

The results showed that there is a significant relationship between the type of general medical

school and the diagnostic and therapeutic approaches. So, it can be said that general practitioners whose place of study is an open university have almost a very low awareness of the role of this bacterium. According to the results of this study, general practitioners' knowledge of Yasuj city was low in response to diagnostic and therapeutic questions. The history of activities, the type of university of education, the age of people, the period of study and the duration of studying have not been associated with the level of diagnostic and therapeutic awareness and as a result, a precise programmed training for teaching at different levels of medicine is designed and implemented.

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