

Determination of *Helicobacter pylori* Sequels of the Center Gastroenterology at Marjan Medical City

Naji Yasser Saadoon¹, Mohammed Malih Radhi², Nada Khazal Kadhim Hindi³,
Rusull Hamza Kh. AL-Jubori⁴

1. Assist. Prof.PhD in Community Health Nursing, Department of Community Health Nursing, College of Nursing, Babylon University, Babylon Province, Iraq Email: nur.naji.yasser@uo.babylon.edu.iq
2. (M. Sc Community Health Nursing, Kut Technical Institute/ Middle Technical University- Iraq). Email: mohammed.amri92@gmail.com
3. Prof. , PhD in microbiology, Department of Basic and Medical Science, College of Nursing, Babylon University, Babylon Province, Iraq). Email: nadakhazal@yahoo.com
4. (M. Sc Community Health Nursing/ Babylon Health Directorate- Iraq). Email: rslhmzh41@gmail.com

ABSTRACT:

BACKGROUND: "*Helicobacter pylori*" infection occurs when bacteria with this name causes infection in the stomach. This usually occurs in small ages "childhood". Aims of the study assess the complication of "*Helicobacter pylori*" in Morgan Medical City at Center of Digestive System.

METHODOLOGY: Designing a descriptive conducted in the City of Hilla, dealing with patients diagnosed with "*Helicobacter pylori*" for the period of April 1st 2019 to July 25th 2019. A convenience sample composed of (150) patients through used interview techniques with participants the data gathered and analyzed by apply a descriptive statistic.

RESULTS: Of 150 patients participated in the study were female (54.7%) aged population (21-30 years) in rural areas (60%) and illiterate learners (23.3%) and (20%) of them government employment. Inflammation of the stomach is the most complications associated with "*Helicobacter pylori*" bacteria infection, they form that (54%) of the total study sample and increase over the years progress.

CONCLUSION: Patients entering the hospital and who with "*Helicobacter pylori*" were "gastritis". Cases of stomach inflammation are the most common of patients with "*Helicobacter pylori*" complications. Further studies can be conducted to involve the national level to identify the causes and risk factors associated with "*Helicobacter pylori*" in rural and urban areas.

KEY WORDS: Determination, Complications, "*Helicobacter pylori*".

INTRODUCTION

The bacterial infection is still unclear. However, investigators reveals that food intake contaminated may increase the risk of "*Helicobacter pylori*". It indicates that the transition were orally from one person to another, mouth, stool, mouth or mouth contagious is likely to send the road ^[1]. People who suffer from the results of "*Helicobacter pylori*" colonization in the stomach is a chronic inflammation of the active stomach. However, it can be prepared from the distribution of the severity of "*Helicobacter pylori*" and inflammatory were chronic response varies in responses to variety factors. Most of these infected individuals to make any other complications, often without any clinical symptoms ^[2]. The clinical results are caused by different non multifactorial with the influence of host factors, and those that severity of the immune response controlled, especially as well as the virulence of the organism injury and environmental factors "especially diet" often plays a dominantly roles ^[3].

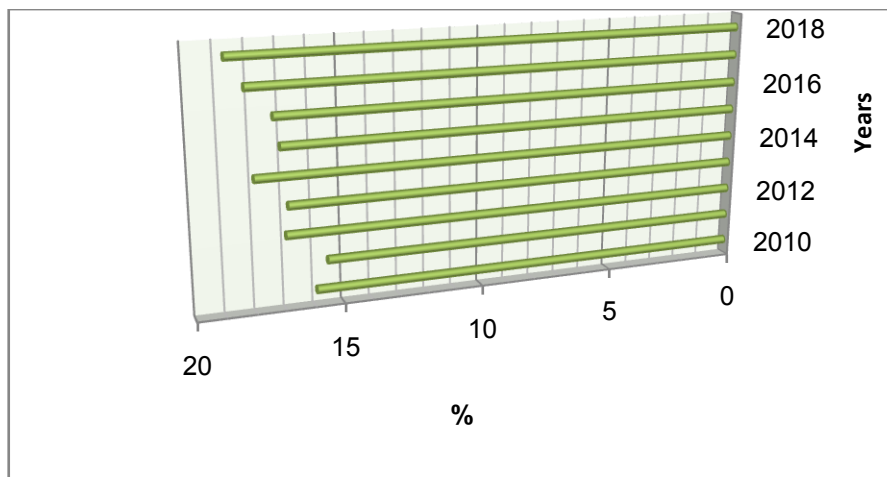


Figure (1): A number of peer review publications annually on "Helicobacter pylori" worldwide ^[4].

Inflammation of the stomach, "stomach" that refers to the inflammation, and the state of the erosion of the tissues of the stomach lining, which may occur either "severe" directly or gradually with the case of "chronic" and this depends on the early classification of the disease on tissue morphology that has changed now with the integration of this pathological mechanism. Sydney offers classification of inflammation of the stomach by the system in 1990, and updated in 1995, and is included both theoretical and fabric categories ^[5]. "Peptic ulcer" obviously is a violation of the mucous membrane that lines the stomach "stomach ulcer" or it may be in the first part of the intestine "duodenal ulcer minute" ^[6]. Particularly in low- and middle-income countries, cancer and more frequent among the most disadvantaged population in general is common, but with a very few exceptions, and public health programs do not exist for the prevention of gastric cancer, which require advanced stages of diagnosis, and rates of survival life is too few, and thus lower in most level areas is the third leading cause leading to the death of cancer in the world, with an estimate of 723 000 deaths in 2012. Although infection rates are declining, and the number of cases and deaths will remain high for several decades due to growing and aging of the population in the world ^[7].

"Helicobacter pylori" is harmful, medically important, and pathogenic bacteria that colonize the stomach from different age groups. It is important to clarifying complications and results to eradication and treatment of infection among patients in Hilla City.

METHODOLOGY

The Study Design

Designing a descriptive conducted in order to investigate the complications of "Helicobacter pylori" by the approach of assessment used for a period of April 1st 2019 to July 25th 2019.

Setting of the Study

The study has been carried out in Morgan Medical City at Center of Digestive System. An hospital located in Hilla, Babil province, Iraq. It is a public medical educational institution that includes many specialized centers that provide free services to citizens of the province and neighboring areas. This hospital includes specialized medical centers dealing with gastroenterology.

Study Sample

A convenience sample " Non Probability" composed of (150) patients collected through the admission in hospital and diagnosed with "Helicobacter pylori". By the used interview techniques with patients after taken oral consents, the data collected and analyzed by applying descriptive statistical data that include analysis approach are: frequencies and percentages.

RESULTS

Table 1: Sample Characteristics (N=150)

Rating	Class	No. (%)	
Patients Age (years)	11-20	19	12.7
	21-30	44	29.3
	31-40	35	23.3
	41-50	28	18.7
	51-60	15	10.0
	61+	9	6.0
Gender	Male	68	45.3
	Female	82	54.7
Residency	Rural	90	60.0
	Urban	60	40.0
	Iltrate	35	23.3
Education	Primary school	23	15.3
	Intermediate or diploma	19	12.7
	Secondary school	21	14.0
	Graduate or post-graduate	28	18.7
	Profession or honors	24	16.0
Occupation	Government employee	30	20.0
	Free work	6	4.0
	Retired	15	10.0
	Houswife	18	12.0
	Students	1	.7
	Unemployed	80	53.3

Out of 150 patients participated in the study were female aged (21-30) years old residents in rural areas unformal educated and government employment.

Table 2: Complications of laparoscopic examination of the bacteria "Helicobacter pylori"

	Classifications	No	%
Complications	"Gastritis"	81	54.0
	"Duodenitis"	40	26.7
	"Gastric ulcer"	9	6.0
	"Duodenal ulcer"	19	12.7
	"Gastric cancer"	1	0.7
	Total	150	100

This table patients with "Helicobacter pylori" bacteria illustrates the complications in terms of frequency and ratio. Results reveal that the inflammation of the stomach is the most complications associated with "Helicobacter pylori" infection bacteria, they form that (54%) of the total study sample. Associated only a small percentage (7%) of gastric cancer with "Helicobacter pylori" bacteria infection.

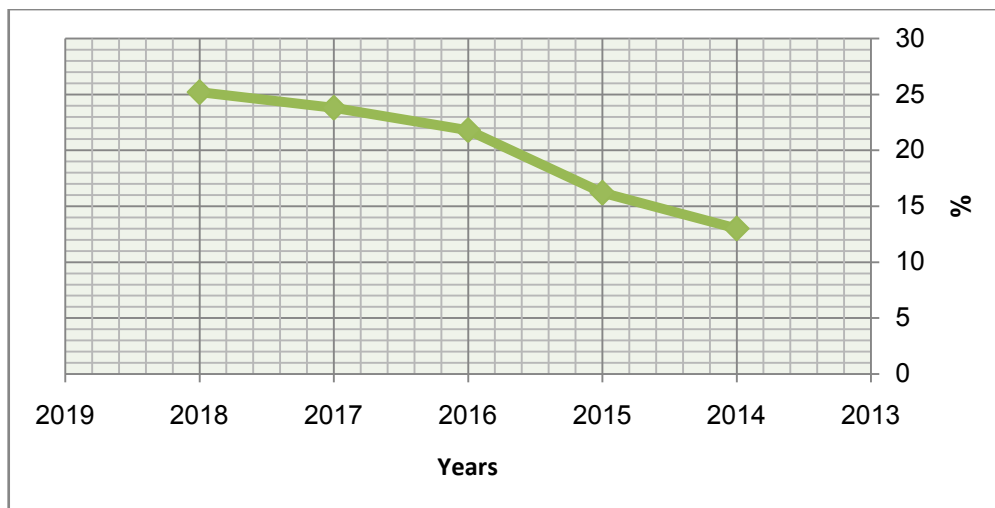


Figure 2: Prevalence of H.pylori rate over the past five years ago
This figure reveals that the increasing prevalence rate is with the years progress.

DISCUSSION

"*Helicobacter pylori*" infection that affects all age groups, especially the elderly, and it plays an important role in gastrointestinal disorders. A few number of studies published on the latter. Our findings depicts females aged population (21-30 years) in rural areas, informal employment and educated government. In light of this, it contributed to this study to assess the spread of bacteria and among the factors factors for students in Turkey. The questionnaire obtained "Helicobacter pylori" positive data collected and analyzed through descriptive statistics from the chi square test. The results showed that (76.2%) and females aged more than (21-23 years), and the unemployed^[8].

Our results reveal that the inflammation of the stomach is the most complications associated with "Helicobacter pylori" infection bacteria, they form that (54%) of the total study sample. Associated only a small percentage (7%) of gastric cancer with "Helicobacter pylori" infection bacteria. This result is consistent with a study of hospital residents Morgan Specialist in the province of Babylon, by taking a biopsy during laparoscopic examination by specialist doctors. Results reveal that the largest percentage (33.3%) of patients with stomach inflammation and complications "Helicobacter pylori" infection bacteria^[9].

In the evaluation of ten prevalence rate for a period of five years, and the results reveal that the prevalence rate is increasing with the progress of the years, as perhaps the development of modern scanning devices, which led to the detection of larger dimensions. In this decade, a study in Khorramabad western Iran, in order to assess the extent of the risk and the likelihood of infection "Helicobacter pylori" factors in this region. Demonstrated findings reveal that the prevalence of infection (43%) of the total (381) case. Education plays an important role in preventing the development of infection. It is certain that the spread of infection was less than that in other parts of Iran, it is expected to decline in the future because of the education and the reduction of poor health behaviors such as chewing food by increasing the proportion of mothers^[10].

CONCLUSIONS

Patients diagnosed entering the hospital and who with "Helicobacter pylori" gastritis. Cases of stomach inflammation considered the most common of patients with "Helicobacter pylori" complications. Studies that can be done with the national level for investigate main factors associated with "Helicobacter pylori" in rural and urban areas.

REFERENCES

1. Maria, R.; Adenilson, V.; Amanda, A. and Luisa, C.: Role of "Helicobacter pylori" infection and lifestyle habits in the development of gastro duodenal diseases in a population from the Brazilian Amazon. *Journal Arquivos De Gastroenterologia*. 2013, 50(3), p.p. 0004-2803.
2. Tayfun, Y.; Dilke, A.; Selen, S. and Oya, Y.: The Prevalence of "Helicobacter pylori" and Related Factors among University Students in Turkey. *Japanese Journal of Infectious Diseases*, 2008, 61(17), p.p. 179-183.
3. Khawaja, S.; Basheer, M.; Janak, D.; Aleem, A.; Santosh, K. and Mohammed, A.: A study on the transmission of "Helicobacter pylori" from food prepared and consumed under hygienic and unhygienic conditions: A first study using biopsy samples. *Scientific Research*, 2014, 6(4), p.p. 43062,10.
4. Moayyedi, P.; Axon, A.; Feltbower, R.; Duffett, S.; Crocombe, W.; Brauholtz, D.; Richards, I.; Dowell, A. and Forman, D.: Relation of adult lifestyle and socioeconomic factors to the prevalence of "Helicobacter pylori" infection. *International Journal of Epidemiology*, 2007, 31(3), p.p. 624-31.
5. Mohammed, M.; Elsanousi, S. ; Khalid, A.; Abdelmounem E. and Mohamed A. (2015) Molecular Identification Of 16s Ribosomal RNA Gene of "Helicobacter pylori" Isolated from Gastric Biopsies in Sudan. *American Journal of Microbiological Research*, 3(2): 50-54.
6. Khawaja, S.; Basheer, M.; Janak, D.; Aleem, A.; Santosh, K. and Mohammed, A.: A study on the transmission of "Helicobacter pylori" from food prepared and consumed under hygienic and unhygienic conditions: A first study using biopsy samples. *Scientific Research*, 2014, 6(4), p.p. 43062,10.
7. Leen, K. and Nahla, G.: "Helicobacter pylori" Infection Among Adults Undergoing Gastrointestinal Endoscopy. *The Iraqi Postgraduate Medical Journal*. 2017, 6(1), p.p. 37-40.
8. Tayfun, Y.; Dilke, A.; Selen, S. and Oya, Y.: The Prevalence of "Helicobacter pylori" and Related Factors among University Students in Turkey. *Japanese Journal of Infectious Diseases*, 2008, 61(17), p.p. 179-183.
9. Rabab, A. and Ala, H.: Multiple antibiotic resistance in "Helicobacter pylori" bacteria Isolated from gastric and duodenal ulcer. *Journal of Applied Drainage Sciences*, 2013, 2013, 6(21), p.p. 2050-2057.
10. Sheikhan, A.; Ataherian, S.; Delfan, M.; Ebrahimzadeh, F. and Pournia, Y.: Prevalence and Risk Factors of "Helicobacter pylori" Infection among Health Center Referrals in Khorramabad (West of Iran). *Asian Journal of Epidemiology*, 2011, 4(1), p.p. 1-8.