

The Use of Traditional Alternative Sources for Treatment *H. Pylori* Infection

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Abstract

Helicobacter Pylori (*H. Pylori*) is the most predominant bacterium in the worlds. As a result, significant efforts have been made to prevent and control illness. According to the study, 45% of participants used "Honey", followed by 22% used "Green tea," for treating *H. Pylori* in the context of early detection and treatment. We draw the inference that, in the absence of a vaccine or antibiotics, the use these sources for treatment *H. Pylori* infection may be beneficial especially for people in underdeveloped nations.

Keywords: Helicobacter Pylori; Green Tea; Honey; Milk; Yogurt

Introduction

In the world, Helicobacter pylori (H. pylori) infection remains a significant global health concern, with an estimated 50% of the world's population infected [1]. The gram-negative bacterium has been detected in around 3 billion people worldwide, mostly in underdeveloped nations [2,3]. One of the most prevalent chronic bacterial infections in the world, H. pylori is known to raise the risk of a number of illnesses, including peptic ulcer disease and chronic gastritis, as well as more serious side effects like gastric mucosaassociated lymphoid tissue lymphoma and gastric adenocarcinoma [2,4]. To stop the bacteria illness from spreading, early detection and treatment are essential [1]. Global patterns, illness transmission, pathophysiology, and antibiotic resistance towards H. pylori have all been thoroughly studied from an epidemiological perspective [5,6]. Since ancient times, medicinal herbal medicine have been used over years by many people in the world as an essential role in primary health care globally [7].

Many traditional medicinal plants and products are now frequently claimed to be beneficial for treating, enhancing, and maintaining human health over year [8]. People in underdeveloped countries like Sudan, where antibiotics are few and expensive when they are obtained, are accustomed to use herbal remedies as a substitute for treating *H. pylori* infection. The current study aims to gives the scientific research community an overview of college students in Darfur region using traditional alternative sources for treatment *H. pylori* infection. To offer the scientific community an overview of traditional medicine that has been used by college students In Darfur University College using cross sectional appraisal. The study received Ethics approval

from the Darfur University College Research Ethics Committee on (March/2023).

Results and Discussion

The data of three hundred and Twenty three participants were studied including (18.0% nurse, 23.2% Medicine, 29.4% Laboratory Science, 9.3% dental, 20.1 Non health) students from Darfur University College. The data covered the general public knowledge, attitudes, and practice about *H. pylori* infection during the large cross sectional. Out of these 185(57.3%) were females and 138(42.7%) were males. The demographical profile of the participants 'shows ages ranged from 18 to over 40 years, with a mean age of 22.10 years. Moreover, among the participants, 279(86.4%) were resided in Urban area, 39(12.1%) were in rural area, and only 5(1.5%) were students living in IDPs camps. of 48.6% of respondent reported have a family history of *H. Pylori* infection.

H. pylori-related primary human health care has seen a rise in the use of herbal items and complementary medicine [8,9], which may offer valuable inspiration for novel treatments [9]. Regards to *H. pylori* common traditional methods used in the treatment of *H. pylori* infection are reported in (Figure 1). The figure presented that 145(45%) participants were used "Honey" as one of the potential treatment methods. Remaining participants estimated by 72(22%) were using "Green tea", and 54(17%) of participants using "Yogurt" and only 52(16%) of participants using "Milk" as method for treatment of *H. Pylori* infection. The finding of the study is in agreement with



previous study which reported that Natural treatments, such as honey, aloe Vera, and probiotics, may help manage bacteria levels of infection

by college student in Darfur University College, Sudan.



Figure 1: Traditional methods used by college students in the treatment of *H. pylori*.

Moreover, Honey has been studied for its anti- H. pylori activity in vitro and it found as alternative treatments option [10]. The most of our findings confirm that 22% of respondent use green tea that may help reduce peptic ulcers caused by H. pylori. The same finding is agreed with previous study which reported that green tea have strong inhibitory activity towards the growth of Helicobacter Spp [11] that may help eradicate the bacterium [10]. In contrast to other studies the consumption of Yogurt may have a protective effect against H. pylori seropositivity in countries where the infection is endemic [12]. As long as a vaccine or new antibiotics remain unavailable, traditional methods and alternative treatments could be particularly valuable choices mainly for human health care in developing country. Additional further research is indeed crucial to confirm the efficacy and safety of these traditional methods. College students may be involved in exploring these alternatives, which could potentially offer new insights and solutions to overcome antimicrobial resistance and provide affordable healthcare options.

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Conflict of Interest

The authors declare no conflict of interest, financial or otherwise.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

 Elbehiry A, Marzouk E, Aldubaib M, Abalkhail A, Anagreyyah S, et al. (2023) Helicobacter pylori Infection: Current Status and Future Prospects on Diagnostic, Therapeutic and Control Challenges. Antibiot (Basel) 12(2): 191.

- 2. Salih BA (2009) Helicobacter pylori infection in developing countries: the burden for how long? Saudi J Gastroenterol 15(3): 201-207.
- 3. Kusters JG, van Vliet AHM, Kuipers EJ (2006) Pathogenesis of Helicobacter pylori infection. Clin Microbiol Rev 19(3): 449-490.
- 4. Malfertheiner P, Camargo MC, El Omar E, Liou JM, Peek R, et al. (2023) Helicobacter pylori infection. Nat Rev Dis Prim 9(1): 19.
- Rawla P, Barsouk A (2019) Epidemiology of gastric cancer: global trends, risk factors and prevention. Prz Gastroenterol 14(1): 26-38.
- Mascellino MT, Pontone S, Vega AE, Malfertheiner P (2022) Editorial: Helicobacter pylori infection: pathogenesis, antibiotic resistance, advances and therapy, new treatment strategies. Front Microbiol 13: 1102144.
- Musa HH, Musa TH, Oderinde O, Musa IH, Shonekan OO, Akintunde TY, et al. (2022) Traditional herbal medicine: overview of research indexed in the scopus database. Advances in Traditional Medicine 23: 1173-1183.
- Rojas P, Jung Cook H, Ruiz Sánchez E, Rojas Tomé IS, Rojas C, et al. (2022) Historical Aspects of Herbal Use and Comparison of Current Regulations of Herbal Products between Mexico, Canada and the United States of America. Int J Environ Res Public Health 19(23): 15690.
- Deng R, Chen X, Zhao S, Zhang Q, Shi Y (2024) The effects and mechanisms of natural products on Helicobacter pylori eradication. Front Cell Infect Microbiol 14: 1360852.
- Ayala G, Escobedo Hinojosa WI, de la Cruz Herrera CF, Romero I (2014) Exploring alternative treatments for Helicobacter pylori infection. World J Gastroenterol 20(6): 1450-1469.
- 11. Matsubara S, Shibata H, Ishikawa F, Yokokura T, Takahashi M, et al. (2003) Suppression of Helicobacter pylori-induced gastritis by green tea extract in Mongolian gerbils. Biochem Biophys Res Commun 310(3): 715-719.
- Ornelas IJ, Galvan Potrillo M, López Carrillo L (2007) Protective effect of yoghurt consumption on Helicobacter pylori seropositivity in a Mexican population. Public Health Nutr 10(11): 1283-1287.

