

**The prevalence of *Helicobacter pylori*
infection among inhabitants and nurses
of institutes for the intellectually
disabled**

Thesis
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(Bacteriology)

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صدق الله العظيم

Contents

<i>Subjects</i>	<i>Page Number</i>
Introduction and aim of work	1
Review of literature	3
Historical background	3
Microbiology	4
Epidemiology	9
Pathogenesis and immune response	15
Clinical Consequence of H. pylori Infection	22
Diagnostic Methods for H.pylori	25
Prevention, Eradication and Treatment	33
Subjects and Methods	35
Results	40
Discussion	52
Summary and conclusion	58
Reference	60
Arabic Summary	86

Introduction and Aim of Work

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Introduction and Aim of Work

Helicobacter pylori (*H.pylori*) is one of the most common cause for chronic human infections. It causes chronic active gastritis and peptic ulceration (**Tytgat et al., 1993**)

H.pylori occurs worldwide but its prevalence is lower in developed than in developing countries (**Korsunen et al., 1992**). The prevalence of *H.pylori* infection increases rapidly with age of 1%/yr. for the over all population. The frequency of infection is higher between blacks (70%) than in whites (34%) (**David et al., 1991**).

H.pylori is a microaerophilic, Gram negative, spiral, non spore forming motile rods. It's oxidase and catalase positive and strong producer of urease (**Nachamkin and Skirrow 1998**).

The actual mode of transmission of *H.pylori* is unknown. It seems that humans are the only natural reservoir for the organism, although infection in cats and primates has been described. The transmission may occur via an oral-oral or fecal –oral pathways (**Lambert et al., 1995**).

Chong et al., (1994) showed that *H.pylori* infection is more common in gastroscopists and endoscopy nurses than in general population. In the institutionalized intellectually disabled, the prevalence of infection has been reported to be very high (**Böhmer et al., 1997**).

It was demonstrated that the receptors for *H.pylori* on the gastric epithelial cell is the blood group antigen lewis b, which is exposed only in blood group

(1)

O individuals suggesting that the availability of H.pylori receptors might be reduced in individuals of blood group A and B compared with blood group O ones (**Boren et al., 1993**).

The aim of this study is to assess the prevalence of H.pylori infection among inhabitants and nurses of institutes for the intellectually disabled and its association with their types of blood group.

Review of Literature

