ATSU

A 10-year Data Analysis of *Helicobactor pylori* Infection in the Hispanic-Latino population of Tarrant County, Texas Mousumi Dey, PA-C, MPAS, DMSc, MBBS, MPhil, DPH Program Affiliation, A. T. Still University, Mesa, AZ

Introduction

Helicobactor pylori (H. pylori) is a worldwide common infection affecting almost 70% 80% of the adult population, one more so in the Latino-American countries (LAC), the prevalence being 79.4% in the adult population.¹ The Hispanic-Latino population in the Tarrant County area is 29.5% and increasing.¹⁻⁵ Since *H. pylori* is a highly transmissible infection, especially in communities with high poverty levels, and is responsible for causing chronic gastritis, peptic ulceration, cholelithiasis, esophagitis, and even gastric cancer. The objectives of this study are to find the prevalence of *H. pylori* in the Hispanic – Latino population of Tarrant County, find the important risk factors for H. *pylori* infection of the population diagnosed with this infection, if insurance coverage can improve follow-up post treatment, reduce morbidity and mortality and if early intervention by endoscopy of high-risk patients can prevent gastric cancer.

Key Words: Helicobactor pylori, ethnicity, insurance coverage, comorbidities, endoscopy, treatment, eradication, insurance.



SPSS Code book creation (3 variables)

Data analysis

Conclusions

- Identifying the population
- NRT IRB Permission
- Raw data collection
- Applying inclusion and exclusion criteria





Fig1.Comparing the prevalence of H pylori infection in H-L vs. other ethnicities (JPS Data from EPIC)



Hispanic Non-Hispanic Fig 3. Comparing the ages at infection



Fig 6. Types of complications in smokers.



Fig 9. Trend of no insurance coverage by age group in Tarrant County 2005 -2018.



Results



Fig 2. Trend of H pylori infection in the H-L population in 10 yrs (JPS Data base from EPIC)



Fig 4 Comparing GB disease to other ethnicities



Fig 7 . Comparing treatment result between smokers and non-smokers



Fig 10. Comparing % of population presenting for treatment by insurance coverage



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Fig 8 Comparing GB disease by gender .



Cause of Death by Insurance Policy and Age group





Gallbladder Disease					
	No	G.B.	Pos	G.B.	Tot
Gender	Disease		Disease		al
Female		59		32	91
Male		47		21	68
Total		106		53	159
Fisher' s exact =					
0.613					
1-sided Fisher's					
exact = 0.347					
Fig 5. Comparing GB Disease by Gender					









Conclusions

- 1. Prevalence of H pylori is increased from 20% (2010) to 34.5%(2021) an increase of almost 14% in 10 years.
- 2. Many patients are seasonal migrants and therefore often report late.
- 3. Smokers and women with gallbladder disease are at higher risk
- 4. Hispanic -Latino patients develop complications 5 years earlier than other ethnicities.
- 5. Mortality and morbidity including GAC.due to *H pylori* infection is higher in this ethnicity compared to other ethnicities
- 6. No difference in eradication of *H pylori* was found between those with or without insurance coverage (11.84% lost to Followup).
- 7. Early intervention by upper endoscopy reduces morbidity and mortality, but needs more research.

Recommendations

- 1. Expand medical coverage inspiring more people to report earlier.
- 2. Screen migrant workers at port of entry
- 3. Screen high -risk patients for GAC by upper endoscopy
- 4. Increase awareness by health education of families and communities
- 5. Invest in creating a vaccine due to increased drug resistance especially the CAG A strain and widespread infection
- 6. Declare of *H pylori* infection as a health hazard to raise public awareness and public safety.

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