**H. PYLORI AND IBD ARE INVERSELY RELATED, SUGGESTING THAT INDIVIDUALS INFECTED WITH THE BACTERIA ARE LESS SUSCEPTIBLE TO THE DISEASE**

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**Background**

Data regarding the association between H. pylori carriage and a decreased risk of inflammatory bowel disease (IBD) are conflicting, as socioeconomic status (SES) is inversely related to both conditions, and could hypothetically confound the results.

Subjects with low SES, as reflected in residence in a deprived neighborhood and overcrowded homes have a greater likelihood of carrying H. pylori. On the other hand, IBD has historically been reported to occur more frequently among patients with a higher SES and improved environmental hygiene.

We aimed to assess whether the association between H. pylori carriage and a diagnosis of IBD exists independently of socioeconomic confounders.

**Methods**

We analyzed socioeconomic and medical information of 262,977 adult patients who consecutively performed urea breath tests (UBT) in Clalit Health Services at set intervals from 2007 to 2014. IBD diagnosis and demographic, prescription and smoking status data and were extracted from HMO electronic database, and synchronized with detailed government-source socioeconomic information.

**Results**

Out of the 262,977 subjects included, 2,240 (0.9%) had been diagnosed with IBD. The overall rate of H. pylori carriage among IBD vs. none-IBD subjects in the low, medium and high SES groups was 60.2 % vs. 70.3%, 58.3% vs. 62.0% and 46.6% vs. 51.3%, accordingly; p

**Conclusions**

Among a cohort of more than a quarter-million adult patients who performed a UBT, H. pylori carriage is inversely associated with a diagnosis of IBD, independently of socioeconomic confounders. Our results suggest that subjects that are infected with H. pylori might be less susceptible to develop IBD. Further studies are needed to explore the precise cause-and-effect relationship of this association.