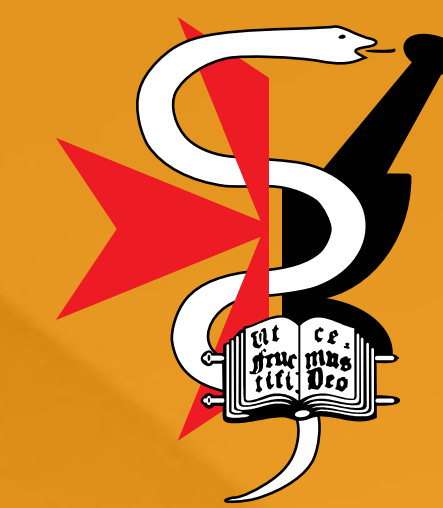


# PROPOSING A POINT-OF-CARE TESTING SERVICE FOR *H. PYLORI* IN COMMUNITY PHARMACIES

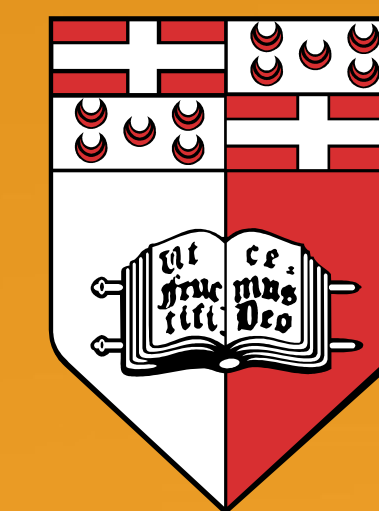
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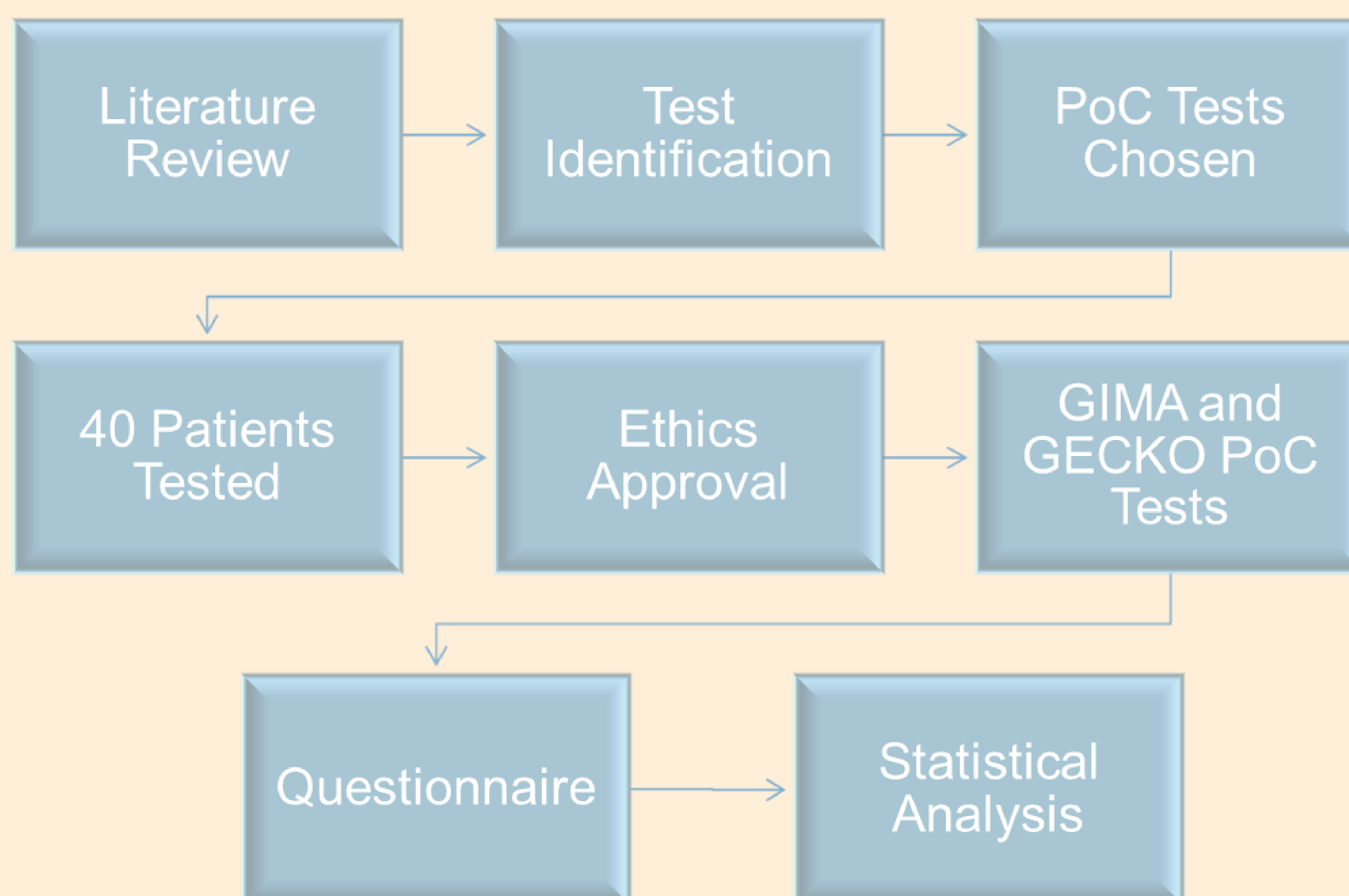
## INTRODUCTION

*Helicobacter pylori* is a bacterium present in over 50% of the world's population, making it one of the most widespread infection in the world, mainly causing stomach problems<sup>1</sup>. The importance of detecting this organism in a community pharmacy setting at the patient's convenience using point-of-care testing is of extreme relevance in patient management.

## AIMS

- To evaluate the practicality, feasibility and patient acceptance of two serological point-of-care testing kits which detect *H. pylori*
- To determine suitability of the testing kits

## METHOD



## RESULTS

Patient sample consisted of 23 females and 17 males. Figure 1 shows the distribution of the age with the mean calculated to be 36.8 years with a range between 18 years to 82 years. All patients agreed that *H. pylori* rapid tests should be offered as a service by community pharmacists. Nine patients were found to be positive for *H. pylori*. Two false negatives and three false positives were obtained.

Figure 2 shows that the predominant symptom investigated was found to be heartburn. Omeprazole was the most popular medication (n=14) used to suppress dyspeptic symptoms whilst some patients (n=12) took no medication at all (Figure 3). The majority of patients would be willing to pay at least €10 for this service (Figure 4). The kits cost €4 and €6 for GIMA and GECKO respectively.

Figure 1: Age

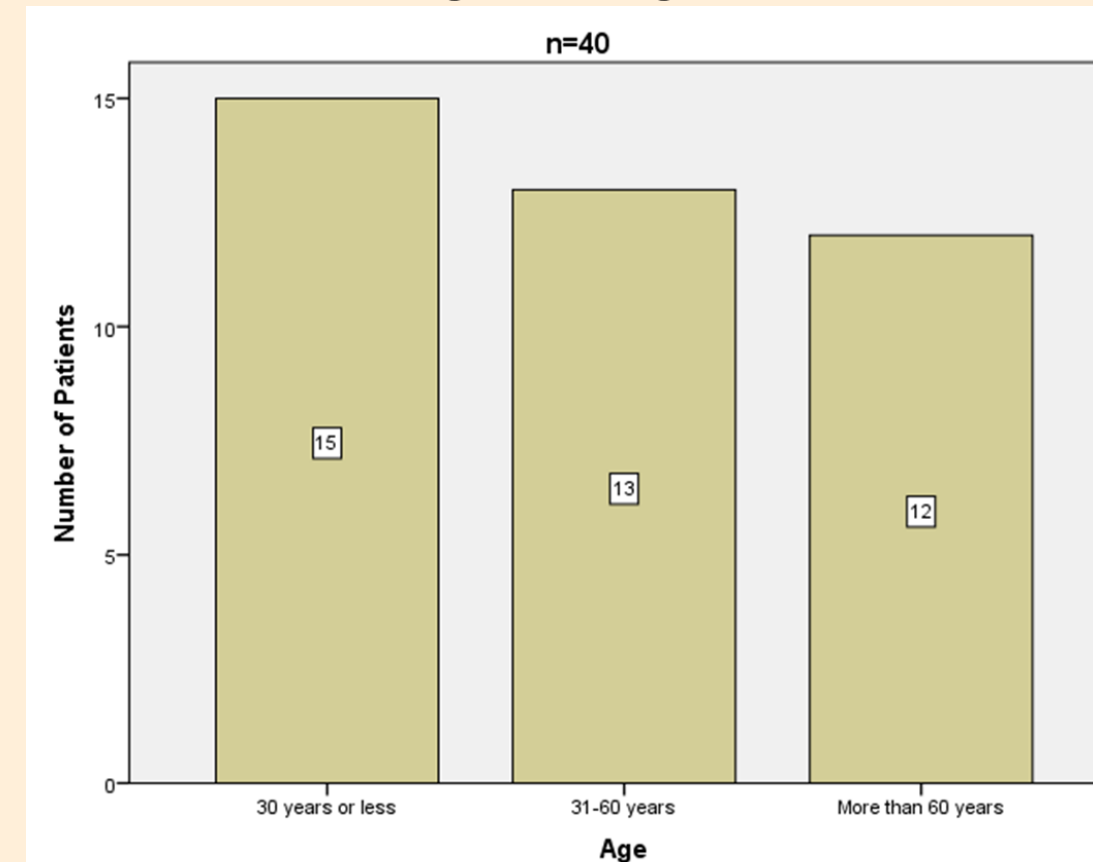


Figure 2: Patient Symptoms

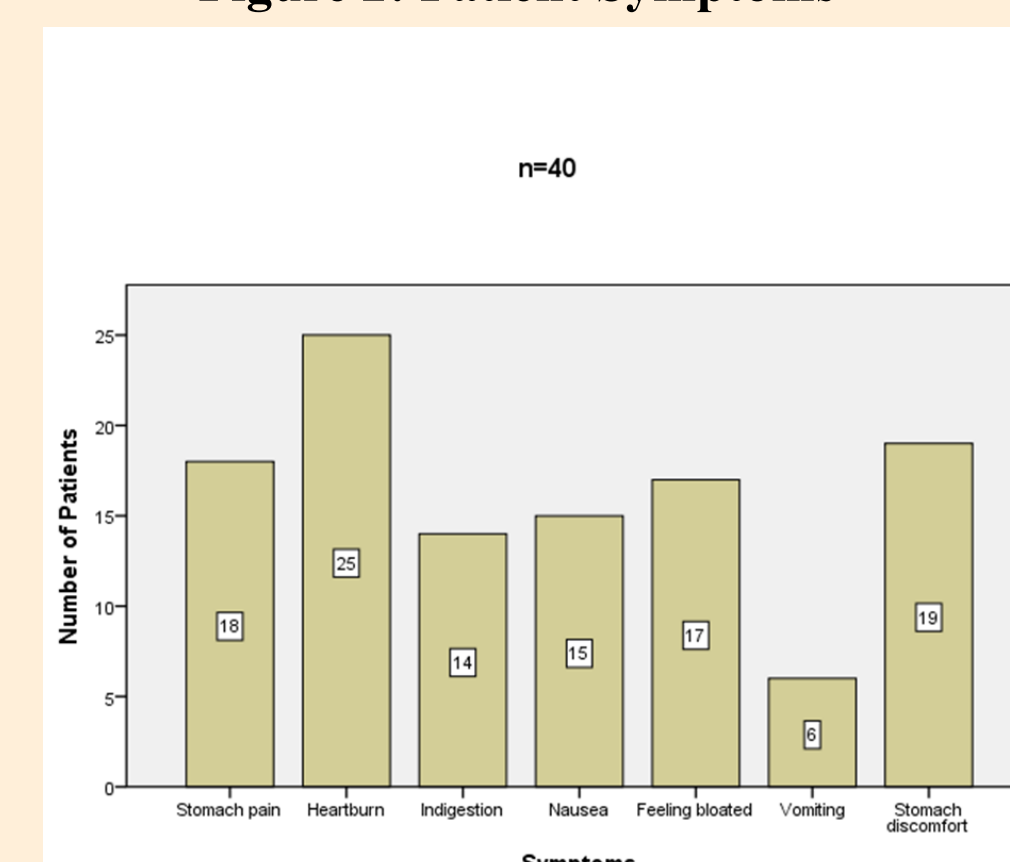


Figure 3: Patient Medication

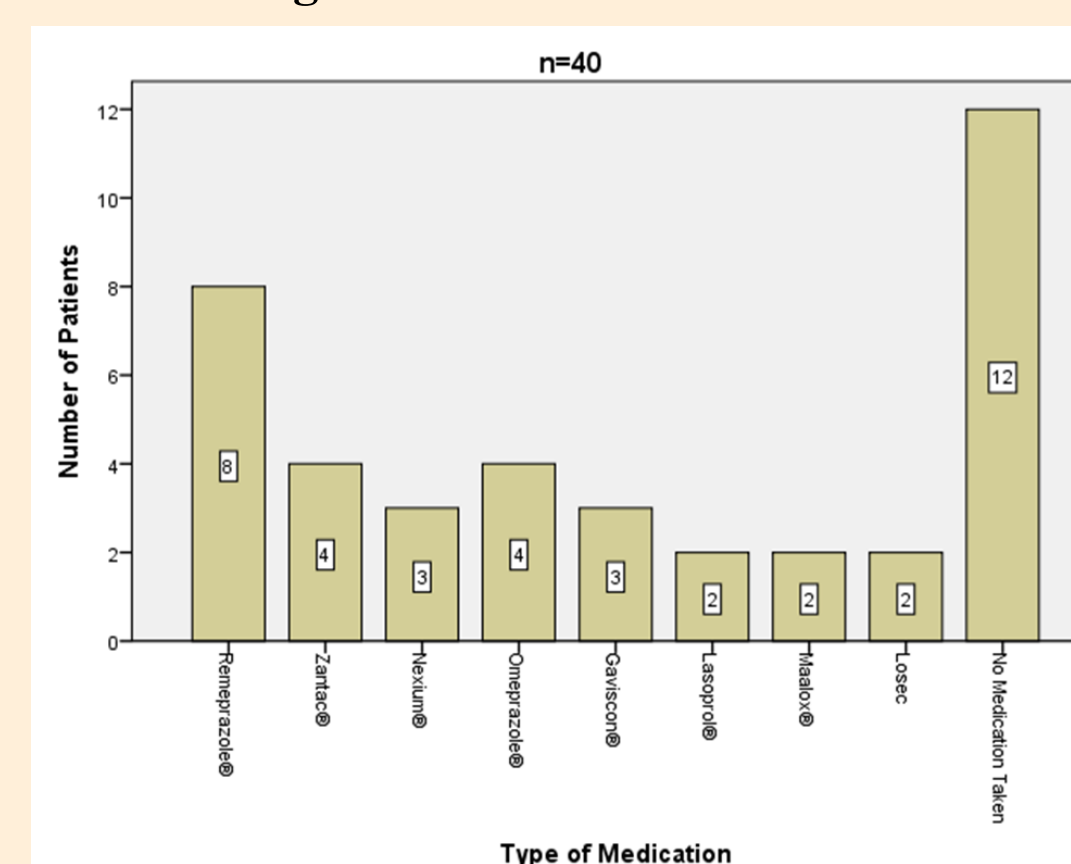
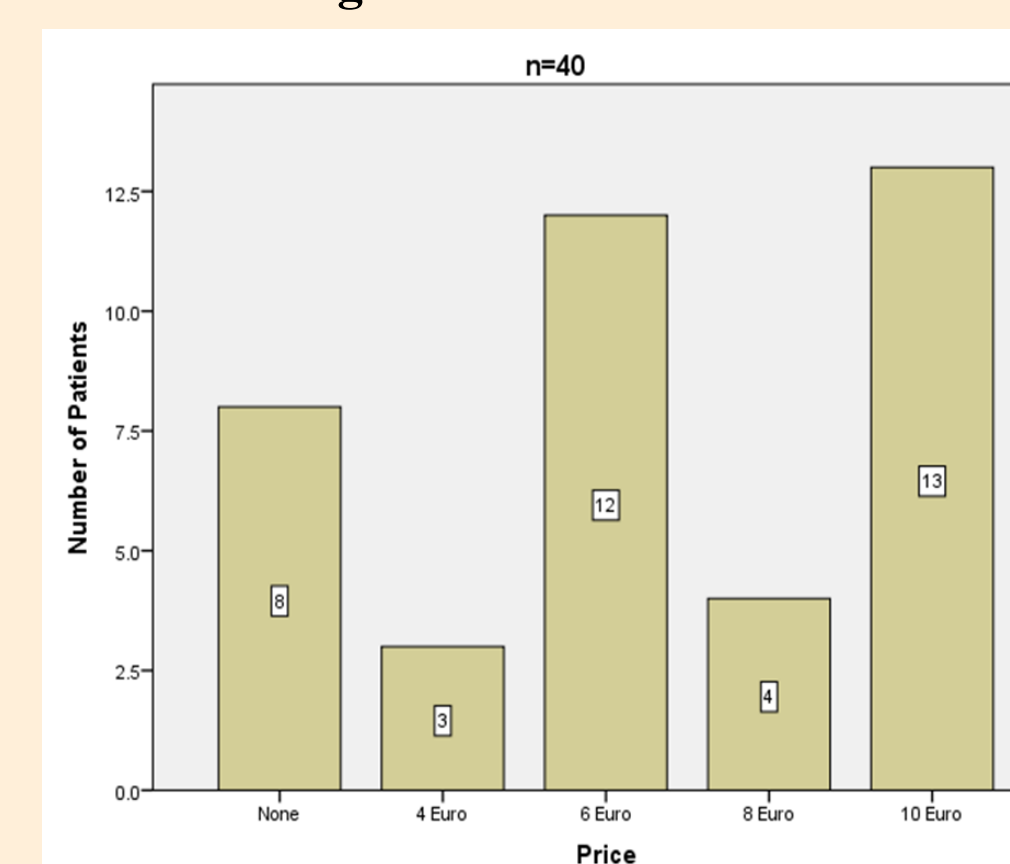


Figure 4: PoC Kits Price



Kit	Sensitivity(%)	Specificity(%)
GIMA	100	50
GECKO	94	50

Table 1: Point-of-care test kits—Sensitivity and Specificity

## CONCLUSION

Point-of-care testing in *H. Pylori* involves serological, faecal and breath tests with the serological being the most popular from the three<sup>1</sup>. From the questionnaire results, most patients presenting dyspeptic symptoms were under 30 years of age and predominantly female, reporting heartburn as the most common symptom. Omeprazole was the most widely used medication, since it is the only proton pump inhibitor available through the NHS. This study has shown willingness of patients to have point-of-care testing for *H. pylori* in community pharmacy. However a more reliable test, such as the urea breath test would be more adequate due to the low specificity for the serological tests used in this study.

## REFERENCES

1. Vella A. Point of Care Diagnostics in Infections [project] : Department of Pharmacy, University of Malta; 2010.