INTRODUCTION

- Point-of-care (POC) tests are a means of near patient investigation carried out by qualified non-laboratory personnel. The Prostate Specific Antigen (PSA) is secreted by the prostate gland and its detected levels in blood vary according to patients' age and pathologies. Although PSA is tissue specific, it is not limited to specific conditions. The On-Call PSA' semi quantitative test was used in this study.

AIMS

To measure pharmacists and patient views on point-of-care testing for PSA. Objectives included:

- Measure device accuracy and validating device
- Identify advantages and disadvantages of using point-of-care testing method for PSA
- Establish the feasibility of introducing such tests in community pharmacy

Method

40 On Call PSA semi-quantitative devices were provided
33 Patients recruited from Health Centre and Community Pharmacies

Patients were informed of the benefits and drawbacks of PSA testing. Following informed consent, PSA testing commenced

Results form device and lab were compared. Four elevated PSA readings were noted on lab results and were not detected on the kit

Questionnaire distributed measured patients' perspectives on kits and symptoms (IPSS)

2 drops of fingerstick blood and a drop of buffer were transferred onto kit. Result generated after 5 minutes

RESULTS

- Comparison of lab and POC tests resulted in the POC kit not detecting 4 elevated PSA readings detected by the lab based test. (n=33) Elevated blood results had readings of 5.58ng/ml, 5.77ng/ml, 19ng/ml, and 6.56ng/ml while kit indicated a level less than 4ng/ml.
- Accessibility, quicker results, closer proximity to residential homes, time efficiency, were the cited POC beneficial properties
- 96% (n=121) of the participating pharmacists think POC testing for PSA is beneficial to patients and 91% think it should be available in pharmacies. 90% would offer this test to patients. 17% of the pharmacists were aware of the IPSS.

CONCLUSION

Results indicate both pharmacists and patients would carrying out point-of-care tests for PSA levels. Patient education on the benefits and drawbacks of PSA testing is required prior to testing. Other conditions such as prostatitis and Benign Prostate Hyperplasia and prostate biopsy and Digital Rectal Examination (DRE) may also elevate PSA thus all PSA elevating conditions must be excluded prior to a diagnosis.

References

2. Burford DC, Kirby M, Austin J. Prostate Cancer Risk Management Programme: information for primary care; PSA testing in asymptomatic men. NHS Cancer Screening Programmes, 2009

Funding: University of Malta Research Grant—Point of Care Testing Study