

## INTRODUCTION

Chronic diseases present a number of challenges on healthcare systems worldwide. In Malta, community pharmacists are in an optimal position to follow up patients with chronic conditions since patients register with a pharmacy of their choice. Pharmacists can participate more actively in chronic disease care through patient monitoring and medication management.

## AIM

To evaluate the impact of a pharmacist-led chronic disease management service within a community pharmacy setting.

The objectives were to identify the occurrence of drug-related problems (DRPs) in patients with chronic conditions and assess the pharmacist intervention on patient health outcomes.

## METHOD

Fifty patients taking at least 1 chronic medication were recruited from a community pharmacy to participate in a chronic disease management service.

The service consisted of a pharmacist-led consultation with patients, with the provision of medication review, lifestyle advice and point-of-care testing (blood pressure, blood glucose and HbA1c testing).

A pharmaceutical care plan was developed for each patient, which included a description of the drug-related problem (DRP) identified and the recommendations to solve the DRP.

A follow-up medication review session was held after 4 months and the results were statistically analysed to assess whether the pharmacist intervention led to an improvement in health outcomes.

## RESULTS

- Forty-eight patients completed the study, with a mean age of 69 years and taking an average of 5 chronic medicines daily.
- A total of 207 DRPs were identified with a mean of 4.25 DRPs per patient, which mainly involved under-treatment (18.8%), monitoring (18.4%) and compliance (17.9%) issues. Most DRPs were solved (78.6%) or partially solved (16.5%).
- Following the pharmacist intervention, there was a significant decrease in systolic blood pressure by 10mmHg ( $p<0.001$ ), diastolic blood pressure by 4mmHg ( $p=0.001$ ), fasting blood glucose by 1.7mmol/L ( $p<0.001$ ) and HbA1c level by 0.5% ( $p<0.001$ ).

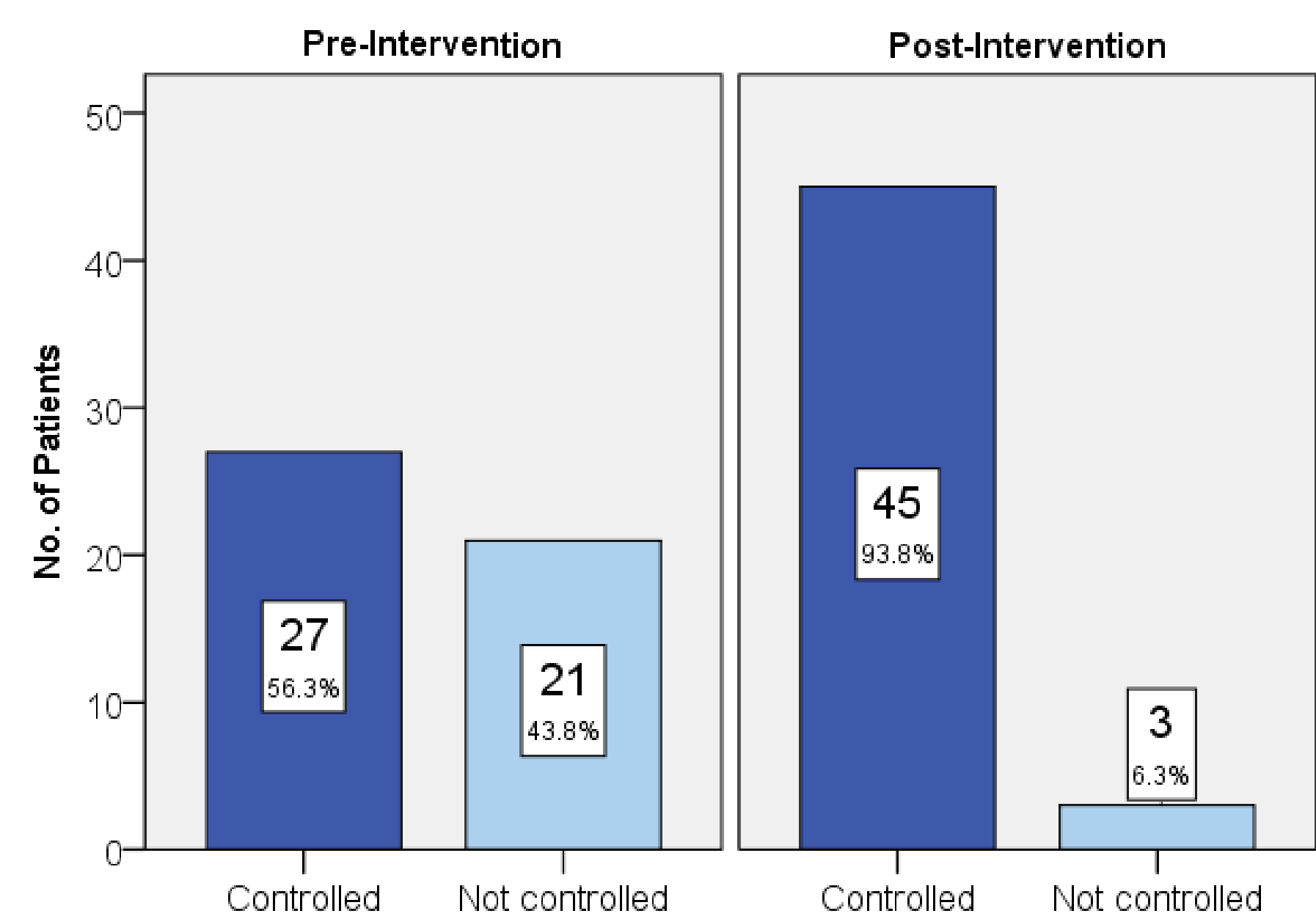


Figure 1: Blood pressure control pre- and post- pharmacist intervention (N=48)

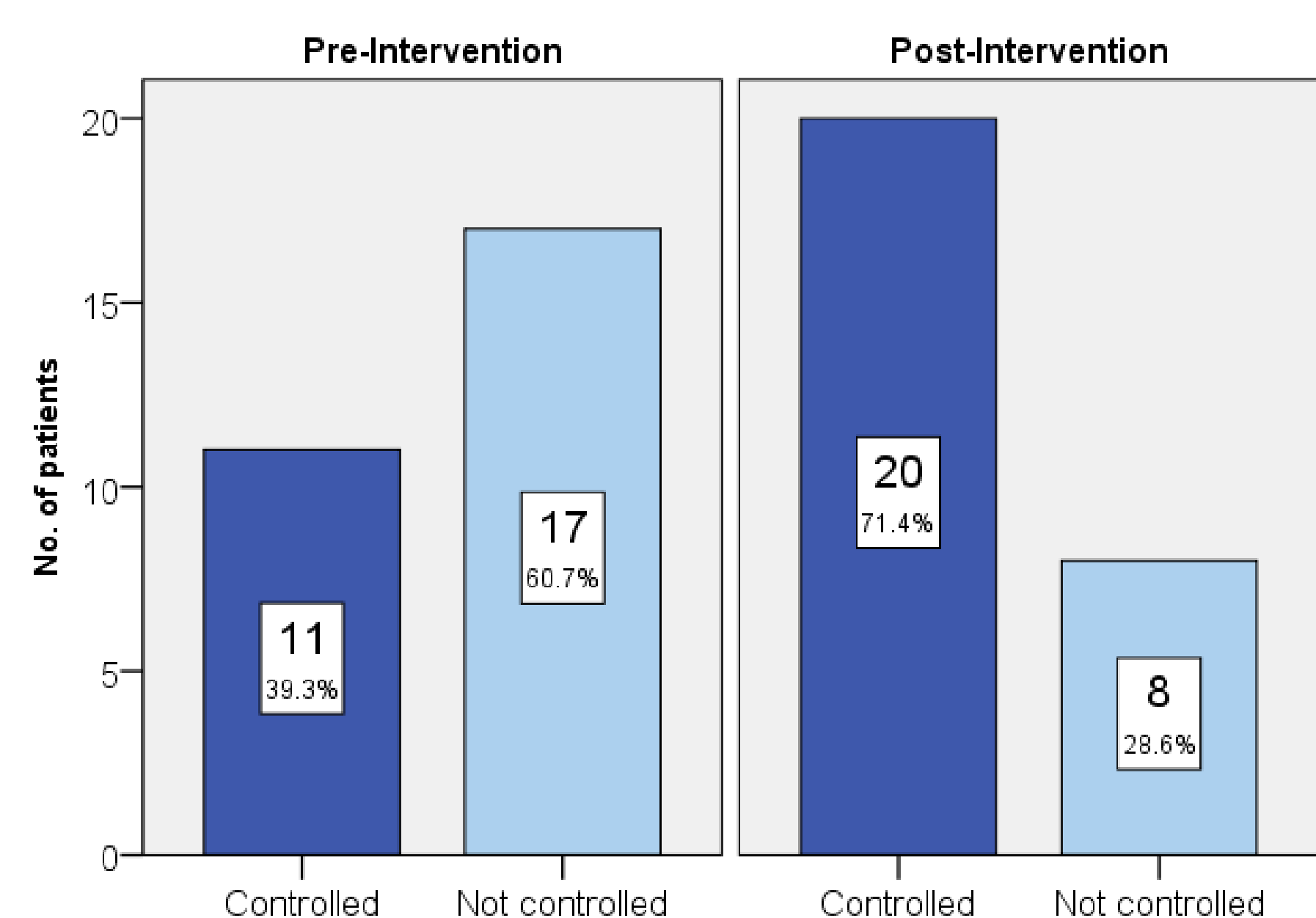


Figure 2: HbA1c control in diabetic patients pre- and post- pharmacist intervention (n=28)

## CONCLUSION

The patient-centred chronic disease management service had a significant positive impact, suggesting that expanding the pharmacist intervention in medication management and patient monitoring, rather than being limited to dispensing, has the potential to contribute to and improve the management of chronic diseases.