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## INTRODUCTION

Pharmacy of your choice (POYC) is a nationwide pharmaceutical service introduced in 2008. Today it meets the needs of more than 150,000 outpatients who benefit from medicines and pharmaceutical devices for chronic conditions which are given for free by the government.<sup>[1]</sup>

An insight into an analysis of drug usage within the POYC scheme could highlight priority areas for pharmacist-led patient counselling, patient self-empowerment education sessions and relevant point of care testing initiatives which can be implemented by POYC pharmacies.

## METHOD

- This study was a descriptive, quantitative study, focusing on data on patient drug usage in POYC Scheme.
- All POYC patients who are registered with the pharmacy were eligible for inclusion. Exclusion criteria were patients who have been inactive, which means that they were not dispensed any medications for at least 3 months. POYC patients were assigned a number and were randomly picked using an online number generator.
- Drug usage history was taken by accessing the POYC patient profile. Data gathered included age and gender of the patient, drug name, dosage, dates when each drug was dispensed and the quantity dispensed from 2017 to 2019. Drugs were then categorized into their respective therapeutic class based on the outpatients' formulary list from the Ministry of Health website. Drugs were coded based on their stock code in the POYC system.
- Data was analysed using Microsoft Excel 2013.

Table 1. Number of drugs used according to demographics

Age (years)	Male (n=48)		Female (n=52)	
	<5 drugs	≥5 drugs	<5 drugs	≥5 drugs
≤40	0	0	1	1
41-50	1	0	6	0
51-60	3	2	3	3
61-70	7	10	10	2
71-80	10	8	9	9
>80	4	3	4	4

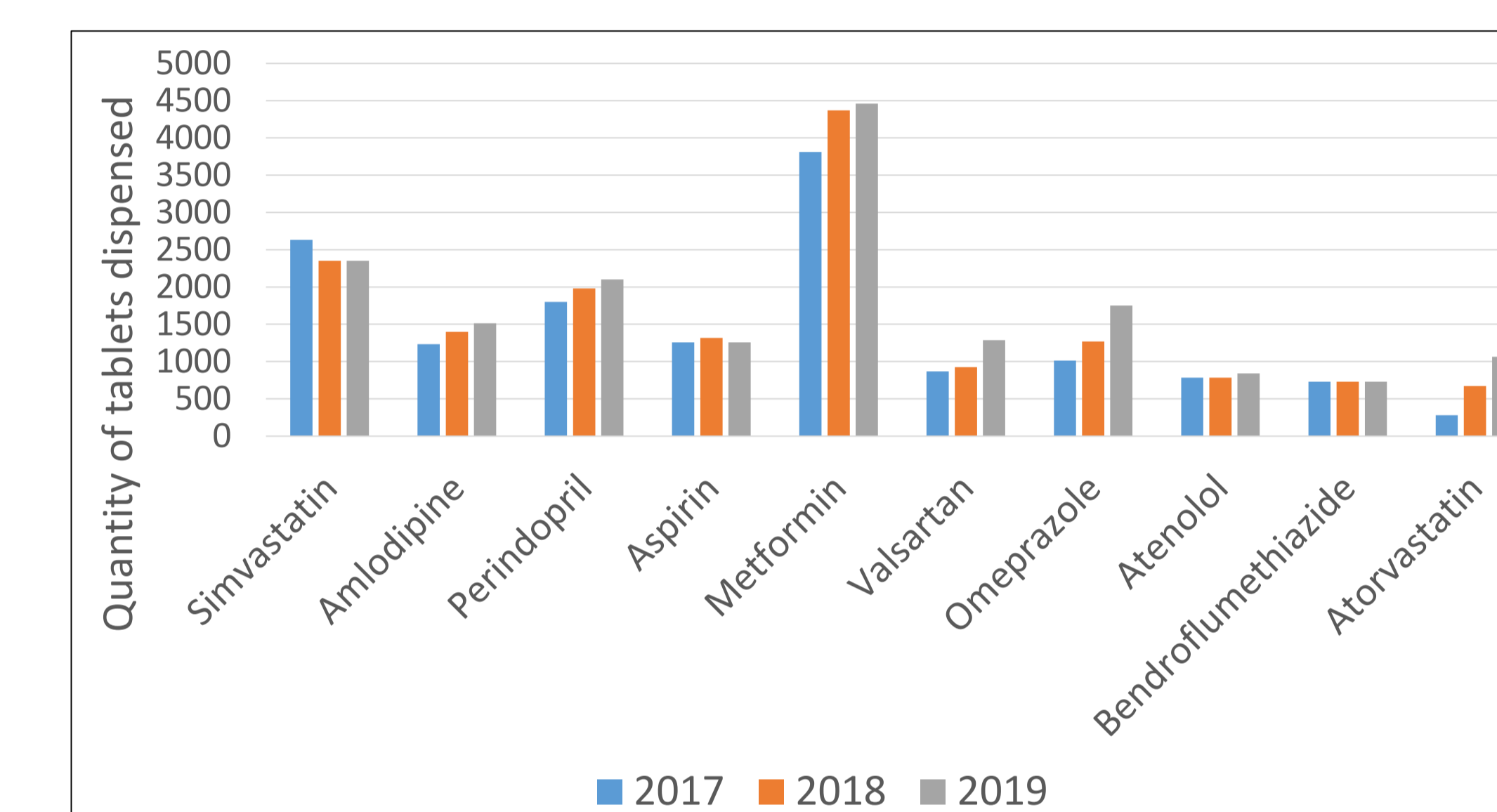


Figure 1. Trend of 10 Most Commonly Used Drugs Across a 3-year Period

## AIM

To compile data on patient drug usage in the POYC scheme within a community pharmacy.

## SETTING

A private community pharmacy in the northern region of Malta having around 800 patients registered for the Pharmacy of Your Choice Service.

Patients are required to register with a specific private community pharmacy and collect their medicinal products for chronic medications every two months from the pharmacy.

## RESULTS

- Drug usage data was obtained for 73 patients, 38 male and 35 female patients (mean age 70 years, from 34 to 87 years): 63 patients aged from 61 to 80 years old, 42 (57.5%) patients took less than 5 drugs and 31 patients (42.5%) at least 5 drugs. Out of these 31 patients, 21 were males aged over 60 [Table 1].
- 71 drugs most commonly prescribed in December 2019 were identified. The 10 most commonly used drugs among POYC patients were simvastatin (37), amlodipine (23), perindopril (22), aspirin (21), metformin (19), valsartan (17), omeprazole (16), atenolol (13), bendroflumethiazide (13), and atorvastatin (12).
- Over the three years studied, there has been an increase in the usage for 7 out of 10 drugs. The greatest rise observed was of atorvastatin, with 1064 tablets dispensed in 2019 from 280 dispensed tablets in 2017, a 280% increase. Omeprazole and valsartan have a 73% and 48.5% increase, respectively. The quantity dispensed for simvastatin decreased from 2,632 in 2017 to 2,352 in 2018 and remained so in 2019. Dispensing of aspirin and bendroflumethiazide has been steady with 1256 and 728 dispensed tablets respectively for each year over the past 3 years [Figure 1].

## CONCLUSION

The study captured drug usage data for patients registered with the POYC scheme in a community pharmacy. The number of drugs currently used by the patients were correlated to their demographics. Polypharmacy was noted to be more prevalent in the male elderly population.

The frequencies of drug use were identified for each drug. Simvastatin, amlodipine, perindopril, aspirin, metformin, valsartan, omeprazole, atenolol, bendroflumethiazide, and atorvastatin were among the most commonly used drugs noted.

The study also generated a usage trend of the 10 most commonly used drugs between 2017 and 2019, with atorvastatin reported to have the highest increase and simvastatin being the only drug noted to have a decrease in use and this is reflected from a change in protocol for statin therapy within the Government Formulary.

## REFERENCES

- The Pharmacy Of Your Choice National Scheme [Internet]. Deputyprimeminister.gov.mt. 2020 [cited 28 April 2020]. Available from: <https://deputyprimeminister.gov.mt/en/poyc/Pages/Poyc-scheme.aspx>