



The Impact of Clinical Pharmacists in Providing Preventive Medicine Services On Overall Health Outcomes

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INTRODUCTION

An ounce of prevention is worth a pound of cure, Preventive medicine (PM) is the practice of promoting preventive health care to enhance patient well-being. Its primary goal is to prevent illness, chronic disease complications, and premature deaths. Without providing preventive medicine services to the patients their overall health condition may deteriorate especially if their conditions need to be detected in early stages. The costs attributable to chronic diseases is an apprehensive issue and will continue to rise over the next decade. The preventive medicine approach will provide a closer alignment with Saudi Arabia's vision for 2030 by ensuring financial sustainability through preventing diseases and promoting public health. There is a huge opportunity for clinical pharmacists to optimize advanced pharmacy-based health services by providing preventative medicine

OBJECTIVES

- Emphasize the role of clinical pharmacists in preventive services such as immunization and screenings.
- Understand the high risk complications and provide early solutions to prevent these complications among patients in Saudi Arabia.

METHODS

A retrospective Cohort study, for all patients seen in a pharmacist-led diabetes clinic between Dec 2019 till Sept 2021. Patients were offered preventive screening measures based on their age and comorbidities and aligned with the international recommendations. These measures included several screenings for depression using Patient Health Questionnaire-9 (PHQ-9), DXA scan for osteoporosis screening, Mammogram and Prostate specific antigen (PSA) tests for breast and prostate cancer detection respectively, improving awareness within patients regarding routine immunization schedules. A proper follow up processes were conducted to assess the screening results and to recommend a specific follow-up. Descriptive statistics are reported as means and standard deviations while categorical variables are reported as percentages and frequencies.

RESULTS

Sixty-six patients were included, forty-four (66.7%) were women. Mean age was 57 years + SD 10.9 . Majority of patients (93.9%) have other comorbidities. Most common comorbidities were hypertension (77%), dyslipidemia (78.8%), followed by others (50%). Most patients (89%) received a preventive service.

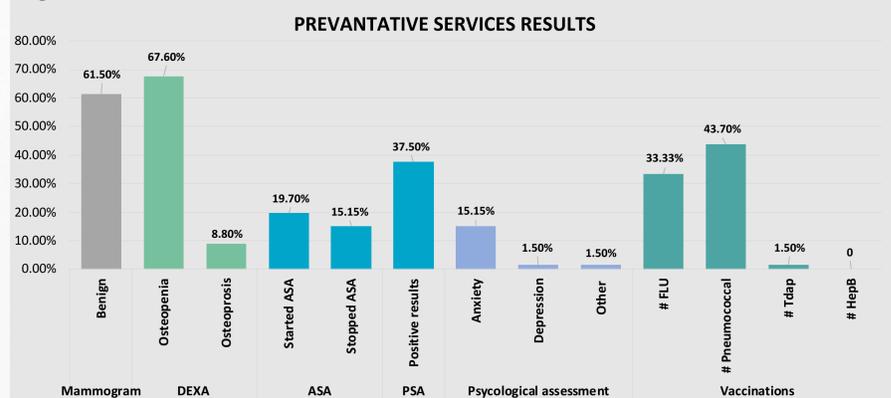
Table1. Clinical and demographics characteristics of the study populations

Patients Characteristics				
Comorbidities	Demographics	Sample size	n = (66)	
		Mean age	57	
		Age ≥ 65	16	24.24%
		# Male	22	33.33%
		# Female	44	66.7%
		# HTN	51	77.27%
		# DLP	52	78.8%
		# HypoTHyroidism	13	19.70%
		# DM + hypothyroidism	13	19.70%
		# others	33	50%

27% of female patients underwent mammogram. None of them had active breast cancer, 61.5% had benign results requiring frequent follow-up. Half of patients had DEXA scan, 67.6% of them had osteopenia while 8.8% had osteoporosis. In addition, 9.1% of male patients agreed to do prostate-specific antigen (PSA) blood test and 37.5% of them had elevated PSA, which indicate there is an increased risk for developing prostate cancer in patients with PSA ≥ 1.5 ng/mL. Regarding vaccination, 33% of patients received at least one vaccine. flu vaccine given to 33.33%, followed by PPSV23 (43.7%) of eligible patients, and Tdap (1.5%).

All patients who are above 40 years old were evaluated for cardiovascular disease risk using 10-year atherosclerotic cardiovascular disease (ASCVD) risk estimation, 19.7% of the sample were candidates to start Aspirin. However, 15.15% of the patients were already on Aspirin with no specific indications. Therefore, Aspirin was discontinued based on the ACC/AHA recommendation that aspirin should not be administered on a routine basis for the primary prevention of ASCVD.

Figure1. Preventative services results



CONCLUSIONS

The significant role of clinical pharmacist has been demonstrated in providing preventive medicine services including routine visits for patients of all ages to promote wellness and disease prevention. Increasing patient health literacy and promoting a healthy lifestyle is the most effective preventive medicine strategy. Additional studies based on more comprehensive health services could be conducted in the future.

REFERENCES

