

Knowledge, Attitude And Practice Of Community Pharmacy Staff To Pharmaceutical Care Services In Montserrado

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Abstract:

Background: *Pharmaceutical care improves patients' outcomes. There is little published information in the literature concerning pharmaceutical care and its activities in west Africa. In Liberia, there is scarcity of published literature on pharmaceutical care practice in community pharmacies. This study assessed the knowledge, attitudes, and practices of staff in community pharmacies to pharmaceutical care.*

Methods: *A descriptive cross-sectional design was employed among 75 community pharmacy staff. Self-administered semi-structured questionnaires were used. A four-part questionnaire assessed participants' knowledge, attitude, and practice to Pharmaceutical Care. SPSS Version 25 was used to analyze the collected data. Descriptive statistics were used to analyze categorical data while chi-square statistics was used to analyze the relationship between knowledge and practice of participants. Statistical significance was set at $p = 0.05$.*

Results: *Nearly half (44%) of the participants were between the ages of 21 – 30 years with more than half (56%) been females. The majority of the participants (85.3%) had good understanding of pharmaceutical care. Almost all (92.0%) of the participants had good attitude and practice to pharmaceutical care. Analysis of participants' knowledge verses practice was significant ($\chi^2 = 25.089, P = 0.001$).*

Conclusion: *The participants demonstrated good knowledge, positive attitude, and good practice toward pharmaceutical care. More educational interventions are required to improve the practice of pharmaceutical care in rural and urban community pharmacies in Montserrado county.*

Keywords: *Knowledge, Attitude, Practice, Pharmaceutical Care, dispenser, pharmacy Technician*

I. BACKGROUND

Pharmaceutical care is the responsible provision of medication-related care for the purpose of achieving definite outcomes that improve a patient's quality of life globally. Pharmaceutical care aims to improve populational and patient's health through the optimal medication use. It is patient oriented and the direct responsibility of pharmacists.

Due to their accessibility, reduced waiting times, and lower prices, pharmacists are the go-to professionals for residents in need of pharmaceutical and medical services. Community pharmacists are aided by staff who are also trained with basic knowledge in pharmaceutical care. To improve the results of medication therapy, pharmacists are shifting from drug-focused strategy to a more patient-centered care.

To meet patient’s needs, pharmacy staff attitude to pharmaceutical care is equally crucial. This requires that all pharmacy staff exhibit high level of responsibility and ownership of pharmaceutical care. However, pharmaceutical care in community pharmacy in developing nations is entirely different in many ways to that of developed nations.

Pharmaceutical Care is largely limited to compounding and dispensing because pharmaceutical care is still in its infant stage. Hence, community pharmacy staff must exert greater effort to advance pharmaceutical care by identifying and resolving drug therapy problems and reporting them.

In Liberia, there is no published data on the practice of pharmaceutical care. Most pharmacists are known to be focused on prescription filling, regulations, and supply chain management. Therefore, this study aimed to assessed the knowledge, attitudes and practice of community pharmacy staff to pharmaceutical care in Montserrado County, Liberia.

II. METHODS

STUDY DESIGN

A descriptive cross-sectional study was performed using self-administered semi-structured questionnaires. The questionnaires assessed the sociodemographic data, the knowledge, attitude and their practice to pharmaceutical care.

STUDY SITE

Montserrado County is one of the counties in Liberia's northwestern region. It is the most populated county in Liberia, with a population of 1,920,914 (LISGIS, 2023). It has the country’s capital, Monrovia, with 1,623,000 people and few public hospitals, one tertiary hospital and community pharmacies. Montserrado contains the only Medical and Pharmacy school in the whole country.

STUDY POPULATION

The study targeted community pharmacy staff who work in or own community pharmacies in Montserrado County. Dispensers and pharmacy technicians above the age of eighteen who work in community pharmacy in Montserrado County and agreed to participate and signed an informed consent form.

SAMPLE SIZE AND SAMPLING TECHNIQUE

A convenient sample technique was employed due to the limited number of community pharmacies and the difficulties involved in recruiting them into the study because of their work schedules. Therefore, a sample size of 75 participants were conveniently recruited.

The investigator explained the questionnaire to the pharmacy staff. Questionnaires were issued to the pharmacy staff to fill at their leisure and collected within 24 hours. All inquiries from the staff concerning the questionnaires were either addressed in-person or by telephone.

DATA ANALYSIS

Descriptive statistics were used to analyzed sociodemographic information and categorical variables such as the knowledge, attitude, and practice of community pharmacy staff. Chi-square statistics was used to analyzed the relationship between knowledge and practice of pharmaceutical care. The level of significance was set at $p = 0.05$. Tables and charts were used to present the data. Statistical Package for Social Sciences version 25 was used as the data analysis tool.

ETHICAL CONSIDERATION

Participants signed an informed consent form and agreed that the information gathered would be kept confidential and private. The purpose of the study was discussed.

III. RESULTS

All seventy-five questionnaires were distributed, filled and returned. This gives a 100% response rate. Females comprised 56%. Participants with 1-5 years of experience were 58.7% of the total, with dispensers accounting for 94.7%. In terms of ownership, 12% of participants of the participants were owners of a pharmacy (Table 1). Table 2 shows the distribution of staff’s knowledge to pharmaceutical care services while Table 3 illustrates pharmacy staff’s attitude. Table 4 demonstrates pharmacy staff practice to pharmaceutical care. Analysis of the relationship between participants' knowledge and practice was significant ($\chi^2 = 25.089, p \leq 0.001$).

Variables	Frequency	Percentage (%)
Sex		
Male	33	44
Female	42	56
Age (years)		
21 – 30	33	44
31 – 40	25	33.3
41 – 50	11	14.7
51 and above	6	8
Educational		
Technician	4	5.3
Dispenser	71	94.7

Table 1: Sociodemographic Data of Participants (n=75)

Pharm Care Service	Agree n (%)	Disagree n (%)	No idea n (%)
PC is patient-centred care.	49(65.3)	9(12.0)	17(22.7)
PC provides drug information	64(85.3)	8(10.7)	3(4.0)
PC is pharmacist responsibility	48(64)	17(22.7)	10(13.3)
PC prevents, identifies, and resolves DRP.	51(68.0)	5(6.7)	19(25.3)

Table 2: Staff’s knowledge on pharmaceutical care services

Pharmaceutical care service	Agree n (%)	Disagree n (%)	No idea n (%)
PC is pharmacist mandate.	57(76)	6(8.0)	12(16.0)
PC improves patient care,	50(66.7)	23(30.7)	2(2.7)
PC is gold standard of practice	69(92.0)	5(6.7)	1(1.3)
PC will improve practice	60(80.0)	9(12.0)	6(8.0)
PC integrates pharmacist in health care teams.	57(76.0)	6(8.0)	12(16.0)
PC worth the additional workload.	38(50.7)	19(25.3)	18(24.0)
PC needed in everyday practice.	70(93.3)	3(4.0)	2(2.7)

Table 3: Staff's Attitude towards Pharmaceutical care

Pharmaceutical care service	Always n (%)	Most-time n (%)	Seldom n (%)	Never n (%)
Screens patients for blood pressure and blood glucose.	21(28)	28(37.3)	11(14.7)	15(20)
Created personal pharm. Care plans for patients.	32(42.7)	9(12.0)	12(16.0)	14(18.7)
Checked patient's personal medical records upon return visits for goals of therapy.	40(53.3)	15(20.0)	6(8.0)	13(17.3)
Intervention necessary to achieve set goals.	41(54.7)	10(13.3)	8(10.7)	27(36.0)
Made medical leaflets for patients.	30(40.0)	10(13.3)	8(10.7)	7(9.3)
Monitored for adverse drug reaction.	50(66.7)	9(12.0)	8(10.7)	7(9.3)
Monitored adherence to medication in chronically ill patients.	49(65.3)		7(9.3)	10(13.3)

Table 4: Staff's Practice to Pharmaceutical care

IV. DISCUSSION

In this study, majority of participants demonstrated good knowledge toward pharmaceutical care. This finding supports previous studies where majority of the participants demonstrated good knowledge of pharmaceutical care during medication dispensing. In the published data, more

than half of the participants understood pharmaceutical care as dispensing medications, review of drug therapy and recommendations to prescriptions were necessary. Moreover, the participants also approved that pharmacy staff were responsible for dispensing and counseling on medications.

This study's findings agreed with similar study where most participants embraced PC as patient-centered care with pharmacists taking responsibilities for preventing, identifying, and resolving potential or actual drug-related problems. However, the findings of the current study vary with other study where pharmacy staff had poor knowledge of pharmaceutical care. The poor knowledge was due to lack of adequate pharmaceutical education, difference in practice settings, and inaccessibility to current drug information.

In the present study, the participants established positive attitude as demonstrated in similar studies. In those studies, dispensers and pharmacy technicians' attitude to PC practice in east Asia. Participants were deeply rooted in the traditional practice of dispensing, medication counselling, drug information and self-care. Participants believed that PC significantly increases patients' confidence in community pharmacy services.

V. CONCLUSION

The participants demonstrated good knowledge, attitude, and practice to pharmaceutical care. This indicates that pharmaceutical care and its activities are the gold-standard practice for community pharmacy staff. Therefore, more educational interventions are required to improve the services of pharmaceutical care in rural and urban community pharmacies in Montserrado county, Liberia.

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