Preparedness of Senior Public Service Pharmacists for Clinical Leadership Roles: A Cross-Sectional Study

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ABSTRACT

Background

The Seven-star Pharmacist concept as promulgated by the World Health Organization identifies the pharmacist as a leader, among many other roles. Clinical leadership skills are essential in all healthcare organizations, regardless of position or area of practice, yet many pharmacists remain unaware of how leadership can be integrated into their daily clinical practice. While there is limited literature on pharmacist and clinical leadership preparedness in the sub-Saharan African region, particularly in Ghana, concerns about the hospital working environment and learning opportunities suggest that pharmacists feel unprepared for the responsibilities of clinical leadership. Furthermore, most leadership preparedness literature focuses on physicians, nurses, and public health professionals, with pharmacists being underrepresented. This study aims to address these gaps and provide insights into methods to enhance pharmacist leadership readiness in Ghana.

Methodology

The current study was an anonymous, online based, quantitative, cross-sectional survey conducted between April and June 2022. Participants were public service pharmacists drawn from the Government and Hospital Pharmacist Association (GHOSPA) of Ghana, who worked in government-funded health facilities within the Greater Accra region of Ghana, one of the sixteen administrative regions of the country. The questionnaire consisted of a set of questions that employed a combination of Likert scales, multiple-choice, open-ended, and closed-ended questions. The questionnaire comprised the following sections: biodata of participants and ratings of their level of preparedness for clinical leadership roles using a 5 point Likert scale.

Results

Nearly half of respondents (46%, n=67) reported their level of preparedness for a clinical leadership role was poor (32%) or very poor (14%). Self-reported level of knowledge and understanding of their clinical leadership roles at the time of their appointment was fair for 35% (n=51) of the respondents, whereas 23% (n=34) reported poor or very poor knowledge of the participants in the study, 65% reported receiving some form of training on clinical leadership either at the time of appointment or during their assignment, with only 35% reorting their training to be effective.

Conclusion

The study underscores the importance of addressing the knowledge gaps and training needs of pharmacists to enhance their preparedness for clinical leadership roles. Furthermore, organizational policies, career development opportunities, and support systems need to be established to promote effective clinical leadership roles among pharmacists.

Keywords: Clinical leadership, pharmacist, preparedness, Ghana

INTRODUCTION

The versatility of pharmacists became a key aspect for the creation of the "seven-star pharmacist" concept by the World Health Organization advisory group in 1997, which was adopted three years later by the International Pharmaceutical Federation. The concept identifies the pharmacist as a leader, among many other roles. Clinical leadership skills are essential in all healthcare organizations, regardless of position or profession, yet many pharmacists remain unaware of how leadership can be integrated into their daily clinical practice (Reich, Javadi, and Ghaffar, 2016).

At the core of health leadership lies the ability to define priorities, provide strategic direction, and foster commitment among various actors within the health system (WHO, 2006). Modern health systems are composed of interconnected networks with different responsibilities, necessitating collaboration and coordination through effective health leadership and workforce management to ensure high-quality, cost-effective, patient-centred, equitable, and safe treatment (WHO, 2006). Leigh et al. (2012) proposed that healthcare policies should emphasize the need for a flexible and confident healthcare workforce capable of employing innovative approaches to navigate complex leadership and management challenges, promoting a sense of adaptability and performance excellence. Clinical leaders serve as the link between management and patient care, as clinicians are burdened with administrative tasks, necessitating the acquisition of additional skills. Technical knowledge is required to comprehend clinical work, while management and administration demand different knowledge and skills for success. A clear understanding of organizational goals and the application of leadership principles to clinical work are essential (General Medical Council, 2012).

The pharmacy profession is undergoing a transition from being primarily focused on product knowledge to actively participating in the planning, delivery, and transformation of patient services (Walker and Whittlesea, 2012). Pharmacists are taking on new responsibilities to meet the increasing demands of drug management systems. Effective leadership approaches that promote collaborative practice and team effectiveness are crucial for pharmacists in their leadership role. This involves empowering patients, advocating for patient interests, and shifting the healthcare paradigm towards a patient-centred, team-based approach (WHO, 2006).

Recognizing substantial leadership gaps and the lack of frameworks for pharmacist leadership capacities, research indicates the underutilized experience and potential capacity of the pharmacy profession. Future practitioners need preparation for clinical leadership roles (Musing et al., 2008; White and Enright, 2013; Ellinger et al., 2014; Neale and Olsen, 2005). While there is limited literature on pharmacist and clinical leadership preparedness in the sub-Saharan African region, particularly in Ghana, concerns about the hospital working environment and learning opportunities suggest that pharmacists feel unprepared for the responsibilities of clinical leadership. Furthermore, most leadership preparedness literature focuses on physicians, nurses, and public health professionals, with pharmacists being underrepresented. This study aims to address these gaps and provide insights into methods to enhance pharmacist leadership readiness in Ghana.

METHODS

Design

The current study was an anonymous, online based, quantitative, cross-sectional survey conducted between April and June 2022. Participants were public service pharmacists drawn from the Government and Hospital Pharmacist Association (GHOSPA) of Ghana, who worked in government funded health facilities within the Greater Accra region of Ghana, one of the sixteen administrative regions of the country. The total population, therefore, according GHOSPA is 299 pharmacists. To prevent multiple submissions, the survey settings was set to reject multiple responses from the same IP address. The survey was optimized for all device types: mobile, tablet and computers, so that participants do not need to zoom in and out to answer questions due to poor rendering.

Sample size & Sample technique

The probability sampling technique of stratified sampling was utilized. Pharmacists were grouped, and samples were drawn from each stratum using the proportionate method. The sample frame is presented in Table 1 below.

Table 1: Sample Frame

Strata	Total Number in the Region	Total Population of Pharmacists	Sample Size
Hospitals	12	183	117
Polyclinics	9	30	19
Government Agencies	13	16	10
TOTAL	**34**	**229**	**146**

The sample size was calculated using Yamane's (1967) mathematical formula:

$$n = \frac{N}{1 + N(e)^2}$$

where n represents the sample size, N is the total population (229), and e is the desired precision set at 0.05. Hence, the determined sample size is 146.

Data Collection Instrument

The questionnaire consisted of a set of questions that employed a combination of Likert scales, multiple-choice, open-ended, and closed-ended questions. The questionnaire comprised the following sections: biodata of participants and ratings of their level of preparedness for clinical leadership roles using a 5-point Likert scale. The questionnaire was developed based on an extensive literature review, with inputs from two academics and two pharmacists. The questionnaires were pre-tested to obtain feedback, which was used to refine the research instrument.

Data Management and Analysis

Statistical Package for Social Sciences (SPSS) version 20.0 for Windows (SPSS Inc- IBM Corp., Armonk, NY, USA) was utilized to perform statistical analysis. Descriptive statistics, including frequencies, percentages, and variable correlations, were employed for categorical variables whereas means and Standard Deviations were reported for continuous variables. The findings were presented using graphs and tables.

RESULTS

Participants' Characteristics

Out of the 146 questionnaires distributed, a total of 121 were recovered, resulting in an 81% response rate. The demographic characteristics of the respondents are summarised in the table below:

| Description	Variable	Frequency	Percentage (%)
Gender	Male	65	54
	Female	56	46
Age in years	20-30	0	0
	31-40	31	26
	41-50	69	57
	50 and above	21	17
Marital Status	Single	18	15
	Widowed	7	6
	Separated	13	11
	Divorced	9	7
	Married	74	61
Education	Bachelor's Degree	10	8
	Post Graduate (Professional)	61	50
	Master's Degree	42	35
	PhD	8	7
Years of Practice (years)	5 to 10	19	16
	11 to15	33	27
	16 to 20	31	25
	21 to 25	19	16
	26 and above	19	16
Years in Current Position (Years)	1 to 5	22	18
	6 to 10	32	26
	11 to 15	34	28
	16 to 20	17	14
	Above 20	16	13

Level of Preparedness at the Time of Appointment

Nearly half of respondents (46%, n=67) reported their level of preparedness for a clinical leadership role was poor (32%) or very poor (14%), whiles around 15% (n=22) described their level of preparedness as "advanced"

Level of Preparedness at the Time of Appointment
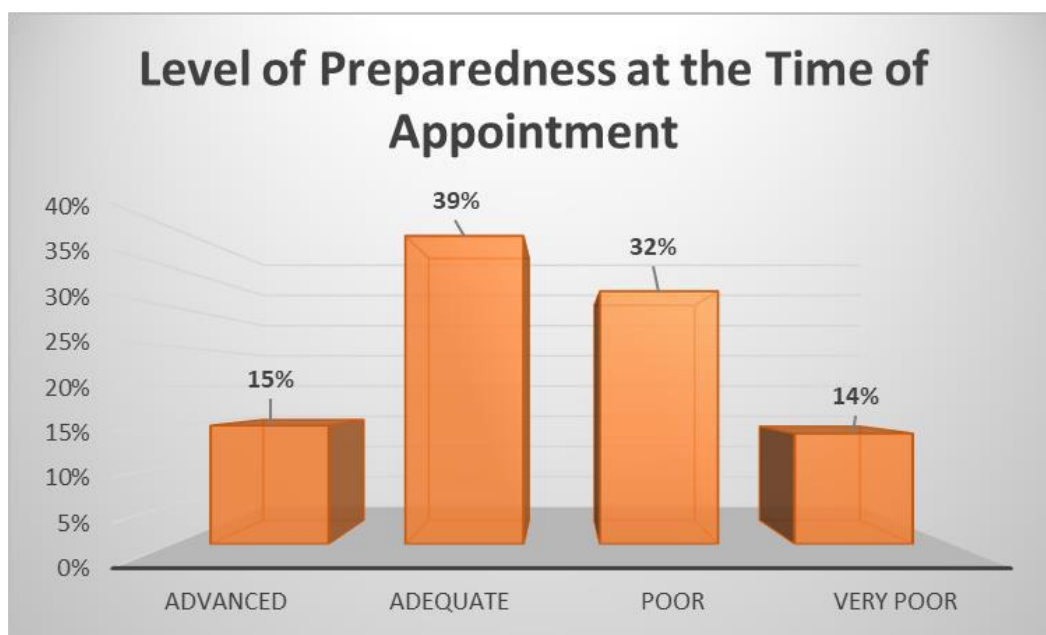
Knowledge on Clinical Leadership Role

Self-reported level of knowledge and understanding of their clinical leadership roles at the time of their appointment was fair for 35% (n=51) of the respondents, whereas 23% (n=34) reported poor or very poor knowledge.

Knowledge on Clinical Leadership Role
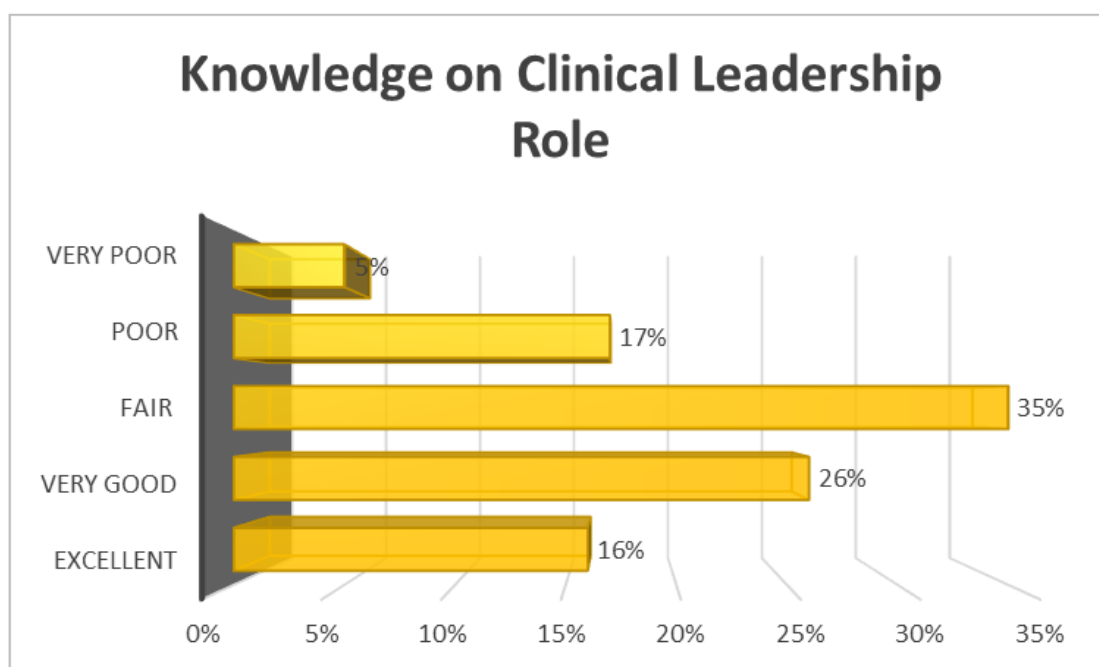
Training on clinical leadership

Of the participants in the study, 65% reported receiving some form of training on clinical leadership either at the time of appointment or during their assignment, while 35% reported not receiving any training. Among respondents who received training on clinical leadership, 35% perceived it as effective, 32% considered it somewhat important, 17% rated it as not effective, and 17% found it to be very effective.

Satisfaction with Clinical Leadership Experience

Around 33% of respondents expressed satisfaction with their clinical leadership experience, while 30% rated it as very good, 19% as excellent, 13% as poor, and 4% as very poor.
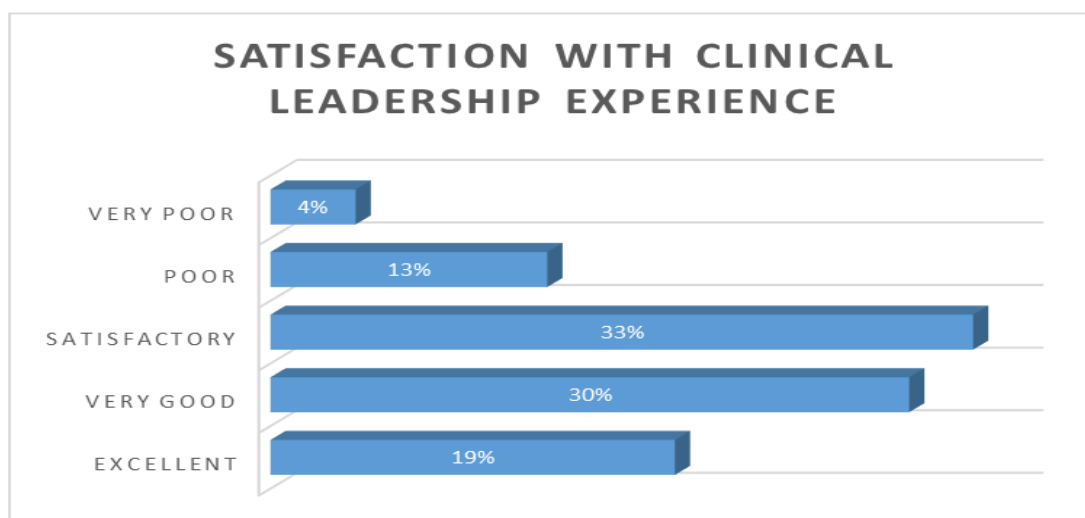
Barriers to Effective Clinical Leadership Practice

The most significant barriers cited by respondents were poor motivation and rewards systems due to the lack of an established condition of service for pharmacists (86%), lack of adequate training in managerial and leadership skills development (80%), lack of logistics and funding support for training and other clinical leadership roles (79%).

Responses	Frequency	Percentage
No clear cut Policy directions on the role of Pharmacists on the clinical team	78	64%
Lack of coaching, mentorship, and succession planning for young pharmacists	77	64%

Organizational politics	50	41%
Lack of logistics and fund support for further and continuous training and other clinical leadership roles	95	79%
Lack of adequate training in managerial and leadership skills development	97	80%
Poor recognition and acceptance by management of clinical setting to allow pharmacists to fit into clinical leadership roles	60	50%
Lack of performance management system	54	45%
Poor motivation and rewards systems due to lack of an established condition of service for pharmacist	104	86%
Leadership training not part of the main pharmacy curriculum, leading to poor fit between education and practice	58	48%
Poor interpersonal relations and support from members in the healthcare team	68	56%
Safety and quality control issues	34	28%
Weak desire of pharmacist to take up leadership roles	26	21%
Complexities of the healthcare system	30	25%
Poor communication and networking strategy between pharmacist and other members of the healthcare team	30	25%
Increasing burnout and high staff turnover resulting in inability to build productive teams and effective leadership	51	42%

DISCUSSION

To the best of the authors' knowledge, this current study is the first to describe the preparedness of senior level pharmacists for clinical leadership roles. Generally, the study revealed that many pharmacists in clinical leadership roles were not adequately prepared for such roles at the time of appointment. Whiles around two-thirds of them have received some form of training in their leadership roles, about 34% of them perceived the training as ineffective. A number of barriers to effective clinical leadership roles were also identified in the study. The study aligns with existing literature that suggests while technical knowledge is provided for pharmacists to deliver quality care, the evolving healthcare landscape requires them to take on collaborative responsibilities beyond their traditional scope of practice (Hammad, Qudah, & Akour, 2017). The contemporary pharmacist faces a challenging position requiring a broader knowledge base and mastery of key clinical leadership competencies. This will enable them to effectively navigate complex patient care demands across various settings in collaboration with the inter-professional healthcare team. Building leadership capacity empowers pharmacists to catalyze

system-level change, innovate healthcare delivery models, and transform healthcare to meet current and future patient needs (Folan et al., 2012; Institute of Medicine (IOM), 2011; Scott and Miles, 2013). Pharmacists must develop leadership skills, engage in ongoing personal leadership development, and actively seek opportunities for professional growth through memberships and leadership roles (Traynor, Boyle, and Janke, 2013).

The findings of this study have practical implications for academia, policy, clinical practice, management, and future research. Firstly, it is recommended that clinical leadership be integrated into the curriculum of pharmacy education at both the degree and professional certification levels. This integration will bridge the gap between education and practice and provide a solid foundation for clinical leadership within the context of pharmacy practice in Ghana. Collaboration and consultation among relevant stakeholders, such as the Pharmacy Council of Ghana, College of Pharmacy, and other institutions and regulatory bodies, are essential in shaping this curriculum development.

In addition, clinical facilities' management should create a supportive environment that fosters the development of clinical leadership skills. Mentorship and coaching programs should be established to nurture the readiness of junior pharmacists, and opportunities for lower-level staff to engage in clinical leadership activities should be provided to foster succession planning and build strong and effective healthcare teams.

One potential limitation of this work is the reliance on self-reporting by pharmacists regarding their preparedness for leadership positions. This introduces the risk of respondents over- or under-reporting their actual level of preparedness. However, efforts were made to address these biases through careful framing and pretesting of the survey questions to enhance their accuracy and reliability.

CONCLUSION

The study underscores the importance of addressing the knowledge gaps and training needs of pharmacists to enhance their preparedness for clinical leadership roles. Furthermore, organizational policies, career development opportunities, and support systems need to be established to promote effective clinical leadership roles among pharmacists.

REFERENCES

Hammad E.A, Qudah R.A, & Akour A.A(2017). The impact of clinical pharmacists in improving Jordanian patients' health outcomes. Saudi medical journal 2017, 38(11):1077.

Martin J, McCormack B, Fitzsimons D, & Spirig R (2012). Evaluation of a clinical leadership programme for nurse leaders. Journal of Nursing Management. 2012;20(1):72–80.

Reich M.R, Javadi D, & Ghaffar A. (2016). Introduction to the special issue on "effective leadership for health systems". Health System Reform. 2016;2(3):171–5.

Olsen S, & Neale G. (2005). Clinical leadership in the provision of hospital care. British Medical Journal. 2005;330(7502):1219–1220

Swanwick, T.& McKimm, J. (2011). What is clinical leadership: Why is it important? Clinical. Teaching. 2011, 8, 22–26. Taylor A, & Groene O. (2015). European hospital managers' perceptions of patient-centred care: a qualitative study on implementation and context. Journal Health Organizational; Management. 2015; 29(6):711–28.

Touati N, Roberge D, Denis J-L, Cazale L, Pineault R, & Tremblay D. (2006). Clinical leaders at the forefront of change in health-care systems: Advantages and issues. Lessons learned from the evaluation of the implementation of an integrated oncological services network. Health Services Management. 2006;19(2):105–122.

Traynor A.P, Boyle C.J, Janke K.K (2013). Guiding principles for student leadership development in the Doctor of Pharmacy program to assist administrators and faculty members in implementing or refining curricula. American Journal Pharmacy Education. 77(10): Article 221.

Weberg D. (2010). Transformational leadership and staff retention: An evidence review with implications for healthcare systems. Nursing Administration Quarterly. 2010; 34:246–258.

Worley M.M, Schommer J.C, Brown L.M, Hadsall R.S, Ranelli P.L, Stratton T.P, &Uden D.L.(2007).Pharmacists' and patients' roles in the pharmacist-patient relationship: are pharmacists and patients reading from the same relationship script? Res Social Adm Pharm. 2007;3:47–69

World Health Organization. (2006). Quality of care: A process for making strategic choices in health systems. Manila: WHO Regional Office for the Western Pacific; 2006.