Perceptions of Managerial Competency Among Pharmacy Department Heads in Vietnamese Hospitals

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departments, play an imp There has been a rise performance in the healt particular. Managerial cor of approaches. The aims heads of pharmacy depar Methods: A cross-sectior 2019. Managerial comp questionnaire consisting was used for data col descriptive statistics. Results: Leadership was Customer/patient focus	rvice managers, including heads of p portant role in the efficient operation of h a in emphasis on measuring competer thcare sector and for health service man mpetency has been investigated through a of study to measure managerial compet trment in hospitals in southern Vietnam. hal study was conducted between April an betency was evaluated using a self-de of seven domains. A cluster sampling te lection. Microsoft Excel was used to the domain with the highest score (4.37 (3.62 \pm 0.77) had the lowest score. All of focus, achieved a Cronbach's alpha higher to	ospitals. scores. Participar ncy and agers in a variety scores than tho participants had a Conclusion: Pub considered to pla Keywords: Hospi d July in eveloped schnique d July in eveloped schnique Correspondence: Lucrat Anuratpan bepartment of P Faculty of Pharm Address: 447, Srit ± 0.42). bool: 10.5530/srp	hich (PhD.) Pharmacy, Division of Social and Administrative Pharmacy, acy, Mahidol University, Bangkok 10400, Thailand. i Ayutthaya Road, Bangkok 10400, Thailand. @mahidol.ac.th

INTRODUCTION

Health facilities are some of the most complex organizations to manage according to management theory and practice.¹ Rising healthcare expenditures, medication errors, automatic prescribing technology, and the clinical pharmacist shortage pose challenges for the leaders of pharmacy departments in hospitals.² Health service managers, including heads of pharmacy departments, play an important role in the efficient operation of their organizations and are responsible for employee performance, patient care services, and the quality of thousands of medications.³⁻¹⁰

The concept and theory of competency is relatively new in the field but calls for a combination of knowledge, skills, abilities, experiences, and virtues that have long been possessed by professionals in the field. Boyatzis¹¹ was perhaps the first to use the term *"competency"* to mean demonstrating successful and efficient performance in the workplace. Managerial competency, as defined by New,¹² is a way in which an individual cooperates with other individuals. Since the beginning of the new millennium, there has been increasing emphasis on the measurement of competencies and performance in healthcare and for health service managers.¹³ Several studies were published with the aim of measuring the managerial competency of pharmacy leaders.^{2, 14-16}

Managerial competencies have been investigated through various approaches. In 2004, Heller et al.¹⁷ explored six essential skills of nursing managers, including interpersonal communication, organizational navigation, crisis time management, and adaptation. In 2006, further aspects of the position were identified by Kagan et al.¹⁸ and Cadmus et al.¹⁹ In 2007, Sherman et al.²⁰ defined five competency domains common to all practicing health care leaders: communication and relationship building, professionalism, leadership, knowledge of the health care

system, and business skills. In their reports published in the same year, Jennings et al.²¹ identified 10 managerial competencies for nursing leaders: personal qualities, interpersonal skills, critical thinking skills, vision, communication, ability to initiate change, people development, health care knowledge, and management and business skills. Schira²² listed the following attributes: communication, openness, motivation, vision. development, passion, risk taking, environmental control, and giving rewards. In 2019, Blazey et al. outlined a valuable step-by-step approach for identifying and implementing properly focused systems for the continuous improvement of hospital organizations and the synergy required within the six major process-oriented parts of the hospital - leadership; strategy; clients; measurement, analysis, and knowledge management; workforce; and operations - that lead to excellent performance results.²³⁻²⁵

In Vietnam, job descriptions have been the new thing in government health facilities, including the definition of competency for pharmacy department managers for different qualification levels, varying significantly among hospitals. With the aim of better defining managerial competency, this study used a self-administered questionnaire to conduct a study of pharmacy department heads in hospitals in southern Vietnam.

METHODS

Study Design

This was a cross-sectional study conducted in southern of Vietnam between April and July of 2019.

Measurement Instruments

A questionnaire was developed based on managerial competency according to the Malcolm Baldrige National Quality Award 2019 guidelines. The instrument consists

of seven domains, including leadership (seven items), strategic management (five items), customer/patient focus (two items), measurement (two items), human resource focus (two items), process focus (two items), and result/outcome (one item). Each question was presented with a five-point Likert scale, ranging from 1 indicating *"strongly disagree"* to 5 indicating *"strongly agree"*, with the mid-point of 3 being *"neutral"*. The instrument was validated elsewhere.²⁶

Data Collection

A cluster sampling technique was used for data collection. From the list of hospitals in southern of Vietnam, which was granted by the local authorities, one hospital was selected systemically. Other hospitals were selected by taking steps of five till the end of the list. A total of 80 hospitals were included in this study. In each hospital, the pharmacy department head was invited to participate in filling out the seven-domain questionnaire. Eventually, 77 questionnaires were included for analysis; three questionnaires were excluded as question missing.

Data Analysis

Microsoft Excel for Window version 2010 (Microsoft[®], Washington, USA) was used to perform descriptive statistics. Domain scores were calculated by dividing total domain scores by the number of items belonging to that domain. The mean scores of managerial competency levels were interpreted according to the following intervals:

1.00 to 1.80: lowest level 1.81 to 2.60: low level 2.61 to 3.40: intermediate level 3.41 to 4.20: high level 4.21 to 5.00: highest level

Ethical Approval

The study protocol approval was granted by the Council of Medical Ethics at Thong Nhat Hospital in Ho Chi Minh City, Vietnam. The purpose of the research was clearly explained to all participants and all interviews were voluntary.

RESULTS

Characteristics

Among 77 hospitals, 39% (n=30) were located in Ho Chi Minh City, the central metropolitan area in southern Vietnam. Almost all of the hospitals were public (92.21%); about two-thirds were general hospitals (66.23%), and half had less than 500 beds (54.55%). More than 50% of department heads were male, married, and over the age of 50. The majority obtained master's degree (66.23%) and were well trained through official, semi-official, as well as other types of education (>60%). Table 1 outlines further details.

Managerial competency

Leadership was the domain with the highest score (4.37 ± 0.42) , followed by strategic management (4.14 ± 0.59) and process focus (4.08 ± 0.75) . Customer/patient focus (3.62 ± 0.77) had the lowest score. All domains, except customer/patient focus, achieved a Cronbach's alpha higher than 0.7 (Table 2).

When comparing average scores among groups of participants, we found that heads aged over 50 years had the highest scores. Participants who experienced official or semi-official training had a mean score of 4.04, which was higher than those who did not have such training (3.82). Moreover, department heads from private and specialized hospitals rated their competency at 4.05 and 4.06, respectively. Figure 1 graphically illustrates the comparisons.

DISCUSSION

The objective of this study was to measure the managerial competency of pharmacy department heads in 77 hospitals in southern Vietnam. The study findings suggested that department managers were well-versed in leadership, but not in-patient focus. In addition, education and training posed important influences on managerial competency. The high value placed on the leadership domain reflected that the department heads used strategic thinking to accomplish their visions. These results were in agreement with the previous report by Nader in 2019,27 which showed that lead nurses' highest priority was strategic thinking (0.1221). Leadership is an essential competency for every manager, as they guide entire organizations, inspire thinking, and encourage subordinates to ultimately achieve the desired goals. However, in a customer-focused business model, an organization cannot operate without customers. In the field of healthcare, the organization is the hospital, and patients are the customers. Listening to and resolving patients' complaints are two of the most important factors to keeping patients engaged with the service, then returning to the hospital.²⁵ Unfortunately, the pharmacy department managers in this study were weak in this regard. Therefore, short training programs on patientcentered orientation should be implemented to improve the healthcare services offered.

The study results have notable implications for managerial competency in hospitals under a variety of ownership models. Private hospitals, also known as for-profit entities, scored higher than their counterparts. This finding may reflect the reality that public hospitals have explicit profit objectives and investment rationales that may make it difficult to allocate resources for leadership development programs. Private hospitals, on the other hand, are predisposed by their mission and values to engage in activities that benefit their business. These results were again similar to those reported by Narazi,²⁸ Lorber,²⁹ McKimmon,¹⁶ and Meadows.² Our findings suggested that private hospitals see managerial competency as a key area of investment in terms of personnel development, which may further encourage active employee engagement.

Table 1. Characteristics of hospital and participants

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Characteristics of	n	%	Characteristic of hospital	n	%
department heads	11	70		11	70
Gender			Other education ^{\$}		
Male	42	54.55	No certification	24	31.17
Female	35	45.45	At least one certification	53	68.83
Age			Place		
26–30	4	5.19	Ho Chi Minh City	30	38.96
31–40	28	36.37	Other	47	61.04
41–50	25	32.47	Hospital level		
51–60	30	25.97	Area hospital	5	6.49
Marital status	Marital status		Provincial hospital	47	61.04
Married	63	81.82	District hospital	25	32.47
Unmarried	14	18.18	Owner		
Highest education in pl	Highest education in pharmacy		Public hospital	71	92.21
Bachelor's degree	12	15.58	Private hospital	6	7.79
Master's degree	51	66.23	Type of institution		
PhD degree	14	18.18	General hospital	51	66.23
Year(s) of experience			Specialized hospital	26	33.77
<2	11	14.29	Capacity of beds		
2–5	17	22.08	<500	42	54.55
5–10	20	25.97	500-1000	27	35.06
>10	29	37.66	>1000	8	10.39
Official training [#]			Notes:		
Yes	60	77.92	*Official training in health management (certificated, diploma		ted, diploma,
No	17	22.08	degree).		
Semi-official training*			*Semi-official training in health r	management (m	entoring, in-
Yes	50	64.94	service training, and non-certified programs).		
No	27	35.06	[§] Other education, such as economics, business management, health sciences.		

Table 2. Mean score and SD of questions in seven domains

Code	Question	Mean	SD
LDS	Leadership (Ca = 0.799)	4.37	0.42
LDS1	Determine the department's vision statement or department's objective	4.17	0.68
LDS2	Communicate the vision or objective to the subordinate and make them clearly understand	4.04	0.77
LDS3	Persuade the subordinate to accept and be willing to do the job	4.23	0.60
LDS4	Control and monitor the accomplishment of the action plan	4.17	0.62
LDS5	Manage the department with high honesty and transparency	4.60	0.59
LDS5	Comply with the hospital rules and regulation	4.64	0.51
LDS7	Follow the moral code of conduct	4.73	0.53
STM	Strategic management (Ca = 0.928)	4.14	0.59
STM8	Prepare the strategic plan	4.04	0.77
STM9	Determine the strategic objectives	4.04	0.73
STM10	Prepare the operation plan	4.21	0.64
STM11	Deploy the operation plan	4.16	0.61
STM12	Expect the outcome of the operation plan	4.26	0.62
CPF	Customer/patient focus (Ca = 0.676)	3.62	0.77
CPF13	Study the patient's needs and expectations	3.53	0.84
CPF14	Build a relationship with the patient	3.70	0.93
MSM	Measurement (Ca = 0.896)	3.70	0.77
MSM15	Measure the output and outcome of the operation	3.81	0.78
MSM16	Analyze and improve the unfavorable outcome	3.60	0.83
HRF	Human resource focus (Ca = 0.776)	3.93	0.67
HRF17	Evaluate the staff competencies (knowledge, skills, and attitudes)	3.79	0.80
HRF18	Build a good (safe and happy) working environment	4.06	0.68
PRF	Process focus (Ca = 0.888)	4.08	0.75
PRF19	Design the working process/system	4.13	0.77
PRF20	Arrange the working process step by step	4.03	0.81
OUT	Result/outcome	3.97	0.53
OUT21	Monitor the key result, output, and outcomes of the department	3.97	0.53
	TOTAL	3.90	0.74

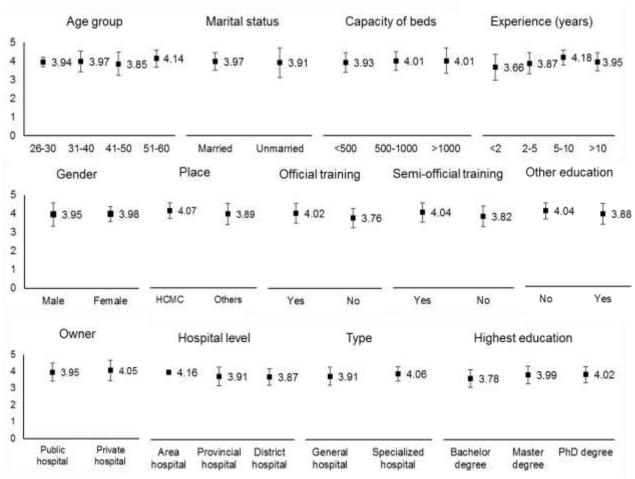


Figure 1. Differences in average scores among groups of participants (mean ± SD)

Age and years of experience may play roles in managerial competency. In general, the older the managers were, the more experience they had obtained, leading to higher average scores. Fine and Omah^{30,31} also highlight that managers with more years of experience and responsibility perceive higher levels of creative problemsolving skills as increasingly important and in demand. Aside from experience, Milena also found gender to a factor associated with managerial perceptions.¹⁴ The authors found that females valued more highly competences in communication and problem solving than did their male counterparts. In our study, however, we found no notable gap between male and female department heads (average score: 3.95 versus 3.98, respectively).

Communication skills, both speaking and listening, are crucial for pharmacists and managers alike, which skills can be developed through education and training. Pharmacists are often seen as the intermediaries between health professionals and patients. They should therefore maintain appropriate levels of communication skills³² in order to achieve high-quality performance in patient care. Pharmacy department heads should also have these skills, as communication is key in effective human resource management. In our study, communication skills were not measured directly as a domain, but instead indirectly by question LDS2-3 (Table 2).

The major limitation of this study was the self-assessment, which was likely to provide over- or under-estimates; this limitation may restrict the broader practical effects and generalization of the results.

CONCLUSION

Pharmacy department heads in hospitals in southern Vietnam were successful leaders but lacked skill in patient focus. Hospital ownership and managerial training were considered to play roles in managerial competency.

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CONFLICT OF INTEREST

The authors have no conflicts of interest to declare in this work.

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REFERENCES

- 1. Drucker P. The practice of management. 1st ed. HarperCollins. 2004.
- Meadows AB, et al. Perception of managerial and administrative competencies of professional pharmacists in the US Department of Defense. Journal of the American Pharmacists Association. 2003. 43(4):488–496.
- 3. Anderson P and Pulich M. Managerial competencies necessary in today's dynamic health care environment. The Health Care Manager. 2002. 21(2):1–11.

- Gunnarsdóttir S and Rafferty AM. Enhancing working conditions. Human Resources for Health in Europe. 2006:155–172.
- Guo KL. A study of the skills and roles of senior-level health care managers. Health Care Manag. 2003. 22:52– 58.
- 6. Hartman SJ and Crow SM. Executive development in healthcare during times of turbulence: top management perceptions and recommendations. Journal of Management in Medicine. 2002. 16(5):359–370.
- 7. Hudak R, Brooke JP, and Finstuen K. Identifying management competencies for health care executives: review of a series of Delphi studies. The Journal of Health Administration Education. 2000. 18(2):213–243, 244–249.
- Mahon A and Young R. Health care managers as a critical component of the health care workforce. In Human resources for health in Europe, M. M. Dubois CA, Nolte E (eds). 2006. McGraw–Hill Education:140–154.
- Rawson G. Characteristics and educational needs of senior health service managers in Australia. The Journal of Health Administration Education. 1988. 6(1):39–51.
- 10. Williams SJ. What skills do physician leaders need now and in the future? Physician Executive. 2001. 27(3):46–48.
- 11. Boyatzis RE. The competent manager: a model for effective performance. 1982. John Wiley & Sons.
- New GE. Reflections: a three-tier model of organizational competencies. Journal of Managerial Psychology. 1996. 11(8):44–51.
- 13. The World Health Organization. Health systems: improving performance—The World Health Report. 2000.
- 14. Santrić Milicevic MM, et al. Competencies gap of management teams in primary health care. European Journal of Public Health. 2010. 21(2):247–253.
- 15. Ellinger LK, et al. Leadership and effective succession planning in health-system pharmacy departments. Hospital Pharmacy. 2014. 49(4):369–375.
- MacKinnon NJ, et al. Management competencies for Canadian health executives: views from the field. In Healthcare Management Forum. 2004. SAGE Publications.
- Heller BR, et al. Educating nurses for leadership roles. The Journal of Continuing Education in Nursing. 2004. 35(5):203–210.
- Kagan I, Kigli-Shemesh R, and Tabak N. "Let me tell you what I really think about you"—evaluating nursing managers using anonymous staff feedback. Journal of Nursing Management. 2006. 14(5):356–365.
- Cadmus E. Succession planning: multilevel organizational strategies for the new workforce. The Journal of Nursing Administration. 2006. 36(6):298–303.
- 20. Sherman RO, et al. Development of a leadership competency model. The Journal of Nursing Administration. 2007. 37(2):85–94.
- 21. Jennings BM, et al. Differentiating nursing leadership and management competencies. Nursing Outlook. 2007. 55(4):169–175. e4.
- 22. Schira M. Leadership: a peak and perk of professional development. Nephrology Nursing Journal. 2007. 34(3).
- 23. Mark LB and Paul LG. Insights to Performance Excellence 2019–2020. ASQ Quality Press. 2019. 393.
- 24. Duarte NT, Goodson JR, and Arnold EW. Performance management excellence among the Malcolm Baldrige

National Quality Award Winners in Health Care. Health Care Manag. 2013. 32(4):346–58.

- Giunta CE. Infusing the Malcolm Baldrige National Quality Award (MBNQA) into Marketing Curriculum. Journal of Higher Education Theory and Practice. 2015. 15(4):57.
- 26. Luerat A. Leadership in pharmacy students, Faculty of Pharmacy, Mahidol University. Isan Journal of Pharmaceutical Sciences. 2017. 13(2):25–38.
- 27. Moghaddam NM, et al. Managerial competencies of head nurses: a model and assessment tool. British Journal of Nursing. 2019. 28(1):30–37.
- Nazari R, et al. The meaning of managerial competency of ICU head nurses in Iran: a phenomenological study. Iranian Journal of Nursing and Midwifery Research. 2018. 23(5):363.
- 29. Lorber M and Skela Savič B. Perceptions of managerial competencies, style, and characteristics among professionals in nursing. Croatian Medical Journal. 2011. 52(2):198–204.
- Fine S. Relationships between personality measures and job performance ratings among far eastern couriers. Applied HRM Research. 2006. 11(1):69–72.
- Omar M, et al. Training evaluation: a case study of training Iranian health managers. Human Resources for Health. 2009. 7(1):20.
- 32. Hargie OD, Morrow NC, and Woodman C. Pharmacists' evaluation of key communication skills in practice. Patient Education and Counseling. 2000. 39(1):61–70.