

MANAGERIAL COMPETENCIES OF PRIMARY HEALTH CARE MANAGERS

By

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Abstract

Introduction: Competencies are the correct combination of information; skills and behaviors owned by individuals and may be an exporter of continuous competitive feature for the organization. Estimating managerial abilities is significant for continuous improvement of health care quality. **Aim of the work:** To evaluate the competencies of Primary Health Care (PHC) facilities physician managers in Zagazig Health District, El-Sharkia Governorate, Egypt and to rate the importance of the key management skills in their present situation. **Material and methods:** A cross sectional study was performed at Primary Health Care Facilities at Zagazig Health District, El-Sharkia Governorate, Egypt. The total number of managers was 46; all of them were included in the study as a comprehensive sample. The data were collected by modified self-regulated questionnaire for self-assessment of the doctors' managerial competency. Data were used to rank the importance of different inquiries. **Result:** Most of the studied sample (52.2%) had low managerial competency particularly in staff management, planning and priority setting, problem solving and financial management but had high communication skills. As regards the importance of the managerial domains, least important domains were planning and priority setting, financial management and leadership while communication and problem solving are the most important crucial aspects. Managerial experience and qualification showed a statistically significant difference with all items of self assessment managerial competency questionnaires of primary health care managers. **Conclusion:** There is a substantial gap in the competency level of primary health care sector managers'. Management capability needs to be strengthened to promote the strategy of enhanced and sustainable delivery of healthcare service. To tackle the skill gap there is a need for suitable and further training and development.

Key words: Manager, Competency, Primary health care and Communication skills.

Introduction

Throughout the past years, there has been expanding international stress on the estimation of performance and competencies in health care (WHO, 2000). Health organizations find themselves in a demanding environment, are seeking greater creativity and productivity to scale up their services (Milena et al., 2010).

Healthcare facilities are a complicated environment to manage because of high patient requests, deficient resources, political influences, the need for the provision of quality care, accountability and accessibility (Mosadeghrad, 2014).

Managers in health care setting are the drivers responsible for guaranteeing the implementation of the objectives, mission and vision of the organization. Health management necessitates particular managerial competencies for healthcare delivery. It is essential to note that researches in both developed and developing countries use the managerial competencies concept to upgrade efficient and effective service delivery. The management capacity gap has been found in the healthcare setting across the whole world, with the largest gap in developing countries (Pillay, 2010).

Health service managers perform a critical role in the smooth administering of the organization also they are clearly accountable for hundreds of staff, facilities, equipment worth millions of dollars and for the quality of health care services (Mahon et al.,2006).

All managers perform four basic functions irrespective of where or what they manage. These functions include planning, organizing, leading and controlling. Planning involves determining organization goals and finding ways of achieving them; organizing entails ordering and coordinating human, information, and material resources to achieve wanted goals; leading involves encouraging others to accomplish organizational goals and controlling involves evaluating performance and tracking progress relative to objectives (Jannati et al.,2017).

Managers need to have many competencies to enable them to execute their functions effectively and efficiently. Managerial competencies are the correct combination of information, skills and behaviors owned by individuals to be effective in a wide range of managerial jobs and various types of organizations and

may be a source of endless competitive feature for the organization (Milena et al., 2010).

Embracing managerial abilities is significant for continuous improvement of health care quality, recognize, disseminate the best managerial practice and design proper health management training (Pillay, 2010). The fundamental premise is that there is a possible gap in the capacities of the health facilities managers (Kalhor et al., 2016). Managerial incompetence has negative sequel for wellbeing, service delivery, health system performance and retention of health providers (Munyewende et al., 2016).

The management competency matrix is composed of core practical and intellectual managerial competencies, as communication, planning, leading, priority setting, problem solving, assessing performance, and team building (Filerman, 2003).

Many countries face the challenge of reshaping their health care administration so as to meet changes in standards of care and correspond to patient demands (Davies, 2006).

Although Primary care managers are given an important responsibility there

is no available competency assessment for managers in primary care sectors also there isn't clear proof whether or not the primary care managers recognize their roles and have the desired skills (Shamsudin and Chuttipattana 2012).

Aim of work

To evaluate the competencies of primary health care facilities physician managers in Zagazig Health District, El-Sharkia Governorate, Egypt and to rate the importance of the key management skills in their present situation.

Materials and methods

Study design: It is a cross sectional study.

Place and duration of the study: The study was conducted at Primary Health Care Facilities in Zagazig Health District, El-Sharkia Governorate, Egypt (46 facilities), from April to September 2019.

Study sample: Managers of Primary Health Care (PHC) Facilities in Zagazig Health District, El-Sharkia Governorate were the target group for this study. The total number of managers of PHC (46) was included in the study as a comprehensive sample.

Study methods: The following two survey instruments were used to collect data as follows:

I-The demographic questionnaire with clinical managers' characteristics was used to gather data on: sex of participants, age, qualification, and years in current position.

II- Self assessment and importance questionnaire: Physician managerial competencies relevant to daily clinic management duties: it is a self-regulated questionnaire adjusted from competencies assessment tool of American College of Healthcare Executives (American College of Healthcare Executives,2018) , latest literature and previously validated related study tools (Milena et al., 2010 and Munyewende et al., 2016). This tool was used to collect data in order to rank the perceived essential managerial competencies in addition to self assessment of the proficiency level of physician managers in these competencies .The tool incorporates six subscales. These are as follows:

1-Communication (seven items): investigates whether the manager listens carefully to others ' concerns, able to write reports, can share ideas with staff and other stakeholders ,understand

and overcome possible communication barrier and able to build relationships.

2-Leadership and management (five items): assesses if the manager is visionary, knows when to consult the relevant individuals on the facility's strategic objectives, motivate the staff, transact with difficult patients, and lowering the infection risk.

3- Staff management (eight items): examines aspects of human resources management (as absenteeism, work delegation, feedback provision, performance monitoring) and in service training.

4- Financial management (nine items): evaluate the ability of the managers to manage the budget in accordance with the financial legislation, , creates realistic budget projections , assess performance of programs in relation to expenditure , involve and educate staff about financial aspects.

5- Planning and priority setting (nine items) : comprises information management dimensions, tasks prioritization, community health needs identification ,able to assess opportunities ,threats ,strengths , weakness , able to constitute mission, vision, goals , objectives and able to set action plans.

6- The problem-solving subscale (six items): if the manager monitors the environment of the work for risks that can influence patients and staff, manages emergencies, and executes corrective action for possible risks and problems.

Throughout the whole questionnaire the managers replied to each of the questions by using five point Likert scale, the task importance ranging from 1 (very low importance) to 5 (very high importance), and managerial skills self assessment ranged from 1 (very low skills) to 5 (very high skills). The total of the main items questions was calculated (Communication, Leadership, Staff management, Financial management, Planning and priority setting, Problem-solving and Grand total) then categorized according to their medians (as a cutoff point) into high importance and high managerial skills if more than it or low if less than it.

A pilot study was conducted on ten managers and a validity test for clarity of language, content relevancy, easiness of understanding and time required to answer was done on the questionnaire. A reliability test was performed using the reliability coefficients (Cronbach's alpha) which was high

for all questionnaires, and appropriate for scientific purposes. The pilot study results showed no variation from the main results so it was incorporated in the main results.

Each health care facility was visited once during the course of the study, on the day of the managers' meeting, the researcher concisely presented the purpose of the study and allowed for seeking of clarification of questions.

Consent

The investigators stressed that collaboration in the research was optional and that confidentiality and anonymity would be strictly preserved and the results will be utilized only for purpose of research. A separate informed consent form was given to all participants (managers of Primary Health Care Facilities) demanding their agreement to be part of the research, and then a self fulfillment questionnaire was distributed to all managers for completion through the allocated time of thirty minutes during the meeting.

Ethical approval

Approval was obtained from Zagazig University Institution and Review Board 2019 (IRB5323),

also a written administrative

permission was obtained from Zagazig Health Districts.

Data management

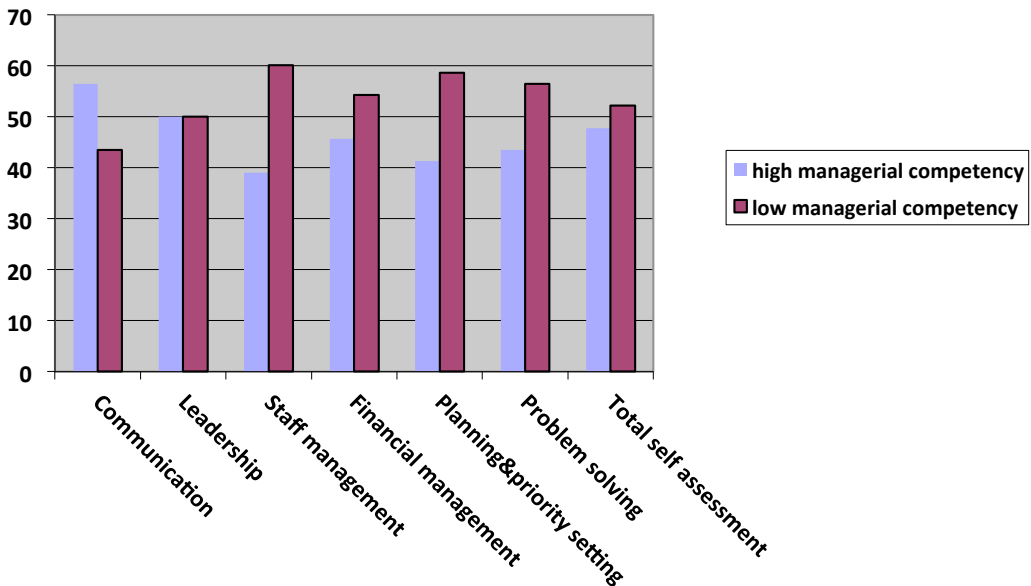
Data were analyzed utilizing SPSS (the Statistical package for Social

Sciences for Windows) version 16.0, Frequency and percentages used for qualitative data, Mean and standard deviation used for quantitative data. Student t test and correlation used as tests of significance.

Results

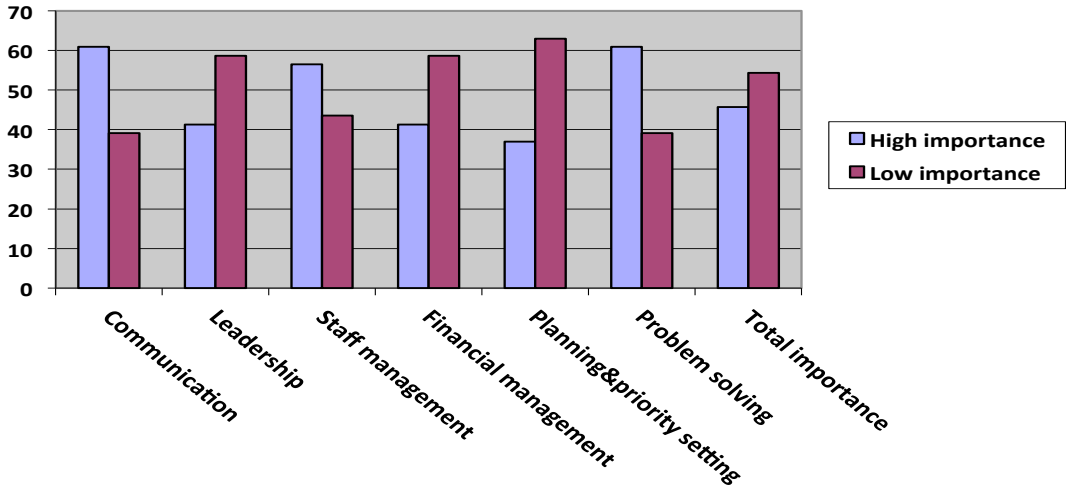
With regard to the socioeconomic features of studied subjects, most of our participants were females (58.7%), their mean age was 37.2 ± 7.4 years, with less than five years managerial experience (60.9%), and General Practitioner (71.7%).

Fig (1): Primary health care physician managers self assessment of managerial competency.



Regarding self evaluation of PHC physician managers' managerial competency **Fig 1** showed that the most of them (52.2%) had low managerial competency particularly in staff management (60.1%), planning and priority setting (58.7%), problem solving (56.6%) then financial management (54.3%) in contrast (56.5%) had high communication skills, As for leadership, the percentage of those who reported having a high competency was equal to those who scored low competency.

Fig (2): Primary health care physician managers perceived importance of competency skill.



About managers perceived importance of competency skill **Fig 2** illustration showed that the total importance of different managerial domains (54.3%) aren't important, most of the participant showed that the least important domains in managerial competency are planning and priority setting (37.0%), financial management (41.3%) and leadership (41.3%) while communication and problem solving (60.9%) are the most crucial.

Table (1): Primary health care manager's perception of the importance of competency skill set and self-assessment of the skill set.

	Self assessment Mean \pm SD	Importance Mean \pm SD	Correlation	
			r	p
Communication	20.8 \pm 4.6	21.9 \pm 4.7	0.8	0.00**
Leadership	16.3 \pm 3.7	16.9 \pm 3.8	0.63	0.00**
Staff management	26.4 \pm 5.4	26.5 \pm 5.2	0.88	0.00**
Financial management	32.63 \pm 4.9	29.15 \pm 5	0.29	0.04*
Planning and priority setting	30.1 \pm 4.9	30.9 \pm 4.9	0.64	0.00**
Problem-solving	19.4 \pm 4.3	20.8 \pm 3.2	0.7	0.00**
Total	145.6 \pm21.9	146.2 \pm23.1	0.9	0.00**

*: Statistically significant

** : Highly statistically significant

Table 1 demonstrates that the mean of total self assessment (145.6 ± 21.9) and participants expressed great self assessment managerial competency (32.63 ± 4.9) for financial management and (30.1 ± 4.9) for planning and priority setting and lowest self assessment (16.3 ± 3.7) for leadership and (19.4 ± 4.3) for problem solving . The mean of total perceived importance of competency (146.2 ± 23.1) participants expressed great importance (30.9 ± 4.9) for planning and priority setting, 29.15 ± 5 for financial management. Also statistically significant positive correlation was observed between the perceived importance of all skills and the managers' self-assessment of their competency.

Table (2): Relation between Primary Health Care PHC physician managers self assessment of managerial competency and some factors.

	Communication Mean \pm SD	Leadership Mean \pm SD	Staff management Mean \pm SD	Financial management Mean \pm SD	Planning &priority setting Mean \pm SD	Problem- solving Mean \pm SD	Total Self assessment Mean \pm SD
Sex :							
Male (No=19)	19.7 \pm 4.4	15.1 \pm 3.5	25.8 \pm 3.5	30.6 \pm 4.2	28.6 \pm 3.4	18.1 \pm 4.7	137.8 \pm 19
Female(No=27)	21.7 \pm 4.7	7.1 \pm 3.6	26.7 \pm 3.7	34.1 \pm 4.9	31.2 \pm 5.6	20.2 \pm 3.8	151.1 \pm 22
T test(p value)	1.4(0.16)	1.9(0.06)	0.6(0.5)	2.5(0.01)	1.8(0.07)	1.7(0.08)	21(0.04)
Managerial experience:							
-Less than five years(No=28)	18.4 \pm 3.1	14.1 \pm 2.2	23.9 \pm 4.5	30.4 \pm 4.9	27.2 \pm 3.0	17.6 \pm 3.9	131.6 \pm 11
-More than five years(No=18)	24.8 \pm 3.7	19.7 \pm 2.9	30.4 \pm 4.8	36.1 \pm 2.6	34.7 \pm 3.8	22.1 \pm 3.3	167.4 \pm 16
T test(p value)	6.3(0.00)**	7.4(0.00)**	4.6(0.00)**	4.5(0.00)**	7.4(0.00)**	3.9(0.00)**	8.9(0.00)**
Qualification :							
General practitioner(No=33)	20.1 \pm 4.4	15.6 \pm 3.4	25.0 \pm 5.5	32.5 \pm 5.2	29.7 \pm 4.6	18.0 \pm 4.1	140.8 \pm 20
Specialist (No=13)	22.9 \pm 4.7	18.0 \pm 4.0	29.7 \pm 3.2	33.1 \pm 4.0	31.1 \pm 5.8	22.8 \pm 2.3	157.7 \pm 21
T test(p value)	1.96(0.05)*	2.1(0.04)*	2.9(0.00)**	0.4(0.7)	0.9(0.4)	3.9(0.00)**	2.5(0.01)*
Age :							
r	-0.03	-0.08	-0.21	0.18	-0.11	-0.11	-0.07
p	0.8	0.5	0.16	0.22	0.5	0.5	0.6

*: Statistically significant

** : Highly statistically significant

Table 2 showed that there was statistically significant difference between self assessment of managerial competency and sex, managerial experience and qualification, and no statistically significant difference with age.

Table (3): Relation between Primary Health Care PHC physician managers perceived importance of competency skill and some factors

	Communication Mean ±SD	Leadership Mean ±SD	Staff management Mean ±SD	Financial management Mean ±SD	Planning &priority setting Mean ±SD	Problem- solving Mean ±SD	Total Perceived importance Mean ±SD	
Sex :								
Male (No=19)	20.7±4.6	16.8±3.4	26.3±4.8	27.9±3.6	30.1±3.8	20.8±3.2	142.7±19	
Female(No=27)	22.8±4.6	17.0±4.2	26.6±5.7	30.0±5.6	31.4±5.5	20.8±3.4	148.7±25	
T test(p value)		1.5(0.1)	0.14(0.9)	0.22(0.8)	1.4(0.16)	0.88(0.4)	0.02(0.9)	0.86(0.4)
Managerial Experience:								
-Less than five years	19.7±3.2	15.6±3.3	24.1±4.1	26.6±3.3	28.7±4.1	19.9±3.1	134.6±15	
(No=28) -More than five years(No=18)	25.5±4.3	19.1±3.7	30.1±4.9	33.1±4.5	34.2±4.3	22.2±3.2	164.1±22	
T test(p value)	5.2(0.00)**	3.3(0.002) *	4.5(0.00) **	5.5(0.00) **	4.4(0.00) **	2.3(0.02)*	5.3(0.00) **	
Qualification :								
General practitioner	20.6±4.3	16.0±3.8	25.4±5.4	28.7±5.3	30.1±4.9	19.9±3.2	140.8±22	
(No=33) Specialist	25.4±3.8	19.2±2.9	29.1±4.0	30.3±3.8	32.8±4.3	23.1±1.9	159.9±18	
(No=13)								
T test (p value)	3.4(0.001) **	2.7(0.00) **	2.2(0.03) *	0.99(0.3)	1.6(0.1)	3.4(0.001) **	2.7(0.01)*	
Age :								
r	0.03	0.02	-0.07	-0.04	- 0.16	0.05	-0.04	
P	0.8	0.8	0.6	0.7	0.2	0.7	0.7	

*: Statistically significant

**: Highly statistically significant

Table 3 revealed a statistically significant difference between importance of different domains of managerial competency and managerial experience and qualification but no statistically significant difference with age and sex.

Discussion

The health care system should cope with the new requirements of citizens, be efficient, accessible, fair and sustainable, and have a good effect

on health. Health care providers need managerial skills and knowledge to function in a very complicated environment of the health care system (Pilav and Šačić 2016).

PHC facilities physician managers in Zagazig Health District, El-Sharkia Governorate, Egypt assess their own competencies and rate the importance of the six key managerial competencies in their present position including Communication, Leadership, Staff management, Financial management, Planning and priority setting and Problem-solving.

A gap in all needed management skills was observed in the current work (Fig 1) which was also found in a similar research from Canada done by Mosadeghrad, 2014 on his study about factors influencing health care service quality; so these gaps seem likely to be universal. Communication is critical for health systems reinforcing (Stefl, 2008), consistent with this, more than 60% of our studied group reported having good communication, and considering it one of the most significant areas of managerial competency. The achievement of any organization depends on the effectiveness of its communication systems and the interaction between employees members (Wagner et al., 2015), and the primary reason for job discontent is bad communication between managers and employees (Kekana et al., 2007). Health

providers spend, about 40 hours a week at work on average, so they need to communicate effectively on a continuing basis (Mokoka et al., 2011).

Regarding Leadership Chen, 2018 found that almost all physicians assume significant leadership duties throughout their careers, but physicians are not taught how to lead nor are they typically rewarded for excellent leadership. Although medical organizations have identified "leadership" as a core medical skill, leadership abilities are rarely taught and strengthened throughout the continuum of medical training. Consistently perceived leadership skills were low for all the physician managers assessed.

Indeed, approximately half of the physician managers not competent in leadership (Fig1) and more than 60% of them reported that it is not essential in managerial skills (Fig 2) ; prior studies have recognized this as a reason for the dysfunctional health systems in Africa (Oleribe et al., 2016).

About staff management, several managers in the current study thought they were not skilled in staff management (Fig1) but deemed it essential in managerial competency. This is comparable to the

work done by Munyewende et al., 2016 on an evaluation of the competencies of primary health care clinic nursing managers in two South African provinces. This could be explained by difficulties in handling unplanned personnel absences and human resources shortages which is one of the factors that has an adverse effect on the health system (Kabene et al., 2006).

Planning and priority setting is a skill limited to lists of operations rather than coordinated processes with measurable outcomes and performance monitoring procedures for PHC (Perry, 2008).

While Planning and priority setting skills are essential for enhancing health systems to address deficiencies, they have received inadequate attention in medical education and training (Hendry and Walker 2004). Matching with that our finding indicates that PHC managers need extra training in planning and priority setting as more than half of them were incompetent in it (Fig1), moreover, consider it not important (Fig2). The results of the present study were backed by other researches that examine PHC and hospital management teams that identify competency gaps in planning and priority setting that

has adverse implications for health care (Kang et al., 2012). This could be explained by the fact that their supervisors were unsupportive and often disrupt these managers' activities through unannounced clinic visits and unrealistic goals and deadlines.

About financial management health systems are constantly under pressure to decrease expenses while also enhancing quality and retaining a powerful workforce (Safarani et al., 2018).

Thus, it is inappropriate for the majority of the studied PHC managers to give themselves low ratings in financial management and their importance (Fig1 and 2).

Problem solving is one of the management domains that the studied group of managers believe to be deficient in it although most of them (60.9%) indicated that it is important in managerial skills (Fig1 and 2). Zori and Morrison, 2009 on their study on critical thinking in nurse management found the same results.

The present research findings showed that some factors had a significant effect on perceived managerial skills as gender; female

managers were more skilled than male (Table 2). Developed nations like Canada revealed similar outcomes along gender lines with greater female representation than males in health management (Mosadeghrad, 2014).

It was also evident that years of work experience is a significant competency impact factor.

The more years of work the greater their self assessment competencies score (Table2). A number of researches showed comparable outcomes Zhiheng et al., 2012 who discovered a significant distinction exists between years in work and competencies in their study on the knowledge, attitude and behavior about public health emergencies and the response capacity of primary care medical staffs of Guangdong Province, China. Likewise Milena et al., 2010 emphasized that managers with more years of experience and accountability perceive greater levels of creative problem-solving abilities on their study on Competencies gap of management teams in primary health care.

Qualification in the current study is also an important factor affecting the self assessment of competency and importance (Table 2 and 3), as it has been found that specialist

have reported greater competency than general practice, consistently Zhifei et al., 2015 showed that health institutions cannot provide high-quality service without their managers < higher education.

The current study detected that there was no statistical significant difference between age and self evaluation, importance (Table 2 and 3). In contrast to Zhifei et al., 2015 who reported a positive relation between age and competency and the 51–60 age groups received the highest score. This distinction can be explained by difference in the sample structure.

Significant difference was demonstrated in the present study between how participants assessed the importance of the necessary skill set and how they use these abilities in their workplace (Table 1). Evidence from the results indicated that the majority of skills sets extremely valued by clinical managers were commonly used in their workplace.

Limitation of the study:

Obviously, some limitations were encountered in this research work. First, managers' competencies were self-reported, rather than assessed by their supervisors. There were a large number of literatures that shows that self-reported

behaviors are unreliable, and that individuals in general were not excellent “self-assessors”. Second some of the managers did not cooperate seriously with investigators in the execution stage of the study. Third With Likert-scale, participants tend to pick neutral statements, (non positive or negative) resulting in the investigator having no idea of the respondents ‘ standpoint but it makes them feel secure.

Conclusion and recommendations:

There was a substantial gap in the competency level of primary health care sector managers. To tackle the skill gap there is a need for suitable training focusing on deficient management skills. Management capability needs to be strengthened to promote the strategy of enhanced and sustainable delivery of healthcare service .This research offers valuable data for authorities that are responsible for health care managers` training and education. Based on this proof, further development of managers, particularly those in the primary health care, is necessary. Managers who are working in primary health care need to enhance their present and future managerial skills. This can be achieved by applying fresh and creative management development programs

with mix of official educational programs, management classes, and close monitoring. Workshops should be conducted to inform managers on latest advances in management theories and practices to enhance their knowledge and skill necessary for hospital management.

Conflict of interest

The authors declare that they have no conflict of interest.

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