

LEADERSHIP COMPETENCIES OF PHYSICIANS WORKING IN PUBLIC AND PRIVATE SECTOR HOSPITALS OF KARACHI

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Abstract

This article investigates the differences between physician working at public and private sector hospitals, on leadership competencies, in Karachi, Pakistan. The concept of leadership is worth exploring because the lack of leadership has a significantly negative impact on organizational performance and in the long run, on the success of the organization or organizational unit. The assumption is that there is a potential gap in the leadership competencies of physicians in public and private sector hospitals. This study thus aims to test whether a contrast in leadership competencies exists among physicians working in public and private sector hospitals. To further authenticate the research gap, an assessment tool of leadership competencies, "Leadership Competency Self-Assessment (Schulich University of Medicine and Dentistry, 2016) was used. A total 118 physicians working in 3 private and 3 public sector hospitals participated in the study. The results showed no significant difference between private and public sector hospitals physicians on the subscales Foundational Leadership as compared to the subscales of Enhanced Leadership and Strategic Leadership competencies which showed significant differences. In addition, the findings on the mean difference in Foundational leadership competencies subscales, between physicians received prior leadership training and have done prior leadership course/s and those who have not received these trainings or taken leadership course/s, were not found to be of significant value. However, significant differences were found in the results on Enhanced Leadership and Strategic leadership competencies subscales on physicians having done the prior leadership training and taken prior leadership course/s. In conclusion the public sector is in need to work towards bridging this leadership gap on all the areas highlighted in the subscales. Physician leaders in Hospitals should be equipped with essential competencies as leaders.

Keywords: Leadership Competencies, Physicians, Hospitals, Enhanced Leadership, Strategic Leadership.

JEL Classification: I100

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Introduction

The World Health Organization who defines a “Physician”, alternatively known as medical practitioners or medical doctors, as professionals who practice medicine to promote, maintain, or restore health through the diagnosis, study and treatment of injury, disease, and other mental and physical damages. Furthermore, physicians represent people who are legally qualified to practice medicine and can provide both generalized healthcare to individuals and communities, or specialize in particular fields (WHO, 2010). As the health sector is challenged by the dynamic health care environment, they must find ways to adapt in order to thrive. This has brought about the growing trend of developing physicians to take up leadership roles with the goal of setting up innovative directions for the organization. (Trastek, Hamilton, & Niles, 2014). Physicians should be leaders in their organizations because of their unique understanding of patients and their interactions with the patients, which not only helps improve patient outcomes but also by pointing out gaps in technology and medical procedures that, once addressed, increase the value of healthcare (Trastek et al., 2014). Physician leaders, thus have critical roles in providing high standards of patient care.

According to the (Cambridge Dictionary, 2018) “Competency” is an important skill that is needed to do a job. The concept of competency generally denotes to functional capacities and to behavioral capacities but the usage of the word is interchangeable; as the management strategy writings of the 1990s highlighted ‘competence’ as a key organizational source that could be used to achieve competitive advantage (Nadler & Tushman, 1999). Furthermore, (Harvard University Competency Dictionary, 2015) identifies competencies through the study of jobs and roles. On the other hand; leadership competencies are behaviors and skills that contribute to superior performance. By using a competency-based approach to leadership, organizations can better identify and develop their next generation of leaders (Brownell & Goldsmith, 2006). This is especially important keeping in account the dynamic complexities encountered in a healthcare organization. Research has shown that a lack of leadership competencies in physicians has been at the heart of hospital failings in the UK (Christie, 2015). A reason for this might be that hospitals consider a lay leader over a physician leader for its success (Falcone & Satiani, 2008), however this is slowly changing. Studies show that an improvement in the effectiveness, quantitative measures and qualitative measures in a unit at a hospital due to physician leadership competencies translates into improved health outcomes (Wong, Cummings, & Ducharme, 2013). Therefore it is fair to claim that when it comes to healthcare, the quality of physician leadership directly and indirectly affects the quality of patient care and is an important factor supporting best practices, patient satisfaction, trust in management, commitment, individual effectiveness, team effectiveness, and the culture and climate of organizations (Health Workforce Australia, 2012).

In Accordance (WHO, 2018) a ‘hospital’ is defined as healthcare institution that has an organized medical and other professional staff, and inpatient facilities, and deliver round-the-clock services. Services include a range of acute, recuperative and chronic care using diagnostic and

curative services. A recent report by the US News and World Report's ranking of Hospitals concluded that the best hospitals tend to be led by physicians (Comarow & Harder 2018). Further validating the claim, a published study by (Goodall, 2011) analyzed CEOs in three key medical specialties of the top-100 best hospitals in USNWR. They were asked whether hospitals rated more highly when run by physicians or by non-physician professional managers. The results showed that approximately 25% higher hospital quality scores were observed in physician-run hospitals than in manager-run hospitals. Presently, global statistics confirm that there is an imbalance in the health workforce, with insufficient health managers, nurses, paramedics and skilled birth attendants found mostly in public peripheral areas (WHO, 2017). In Resemblance to other South Asian nations, health care infrastructure in Pakistan is satisfactory in urban parts of the country but severely compromised in the rural zones. It is unfortunate that Pakistan is one of those countries where the rural population and the underprivileged groups in the squatter settlements of the urban areas lack appropriate and accessible health services (Hezekiah, 1993). Similar to other countries in the sub-continent, Pakistan has an array of health sectors because there are variations in the levels of healthcare seen not only among the urban-rural disparities but also private and public setups. (Islam, 2002). An Indian study by Akinyemi, Martineau and Tharyan (2015) concluded that physicians working in the private sector seem to be more familiar with the concept of evidence-based practice; a required competency for a physician leader (Prather & Jones, 2003) as compared to public sector physicians. Upon analysis the perceived causes included lack of private time for literature review as a product of high patient load, a fragile supervisory system, stress from caregivers and medicinal companies, as well as monetary deliberations (Akinyemi et al., 2015). Thus, in order to increase the provision of quality care for patients, leadership competencies in physicians is worth exploring among private and public sector with the goal of identifying the areas of improvements and development, later for the use in bringing about better leadership training opportunities, an improved monitoring system and an efficient partnership between the public and private health care sectors.

The assumption is that there is a potential gap in the leadership Competencies of physicians in public and private sector hospitals (Pillay, 2008). The aim of the study is two folds 1) To find out the difference in physician employed in public and private on leadership competencies. 2) To measure the effect of leadership training and leadership course/s on physician leadership competencies.

Literature Review

Healthcare services in Pakistan are delivered in part by the public sector and in part the private sector. The health care delivery status is such that the country is chiefly regulated by the private sector which represents roughly 80% of all outpatient visits (Hakim, 1997). Furthermore, differences exist between public and private healthcare institutions. Private hospitals in the country are aimed at providing better healthcare facilities to the patients and also contribute positively towards lowering the burden on public hospital, by offering better services (Irfan & Ijaz, 2011).

Physician leadership is essential in delivering quality healthcare and development of services. A study done by Arasli, Ekiz and Katircioglu (2008) on quality of services provided in the public and private hospitals, concluded that the private hospitals were seen to be offering better quality services and care over the public sector hospitals. Prior research done on Pakistani hospitals also concluded that private hospitals aim to work towards continuous improvement in the system and provide quality healthcare services to their patients (Irfan & Ijaz, 2011). On the other hand, the public healthcare institutions are perceived to be inefficient, not well-maintained, and result in dissatisfaction of the patients (Khan, 2011). Research provides evidence that in order to eliminate the public and private sector disparities in the areas of leadership there is a need, and a noteworthy demand, for a pertinent program addressing the need gap (Pillay, 2008).

Studies have now shown a positive impact of clinical leadership on hospital performance (Sarto & Veronesi, 2016). Literature recommends that involvement of physicians in leadership positions, has critical advantages for healthcare outcomes (Veronesi, Kirkpatrick & Vallascas, 2013). It has been brought up that in the challenging and constantly changing health care framework physician leaders bring a remarkable array of competencies in the business of medicine (Falcone & Satiani, 2008), as they are better skilled to comprehend clinical difficulties and general patients' needs (Lister, 2007). Also, they improve on their communication with the clinically-qualified work force and additionally get more prominent legitimacy (Witman et al., 2011). In addition a US study reports on the association of physician leaders and hospital performance reports a significant relationship does exist between the two (Goodall, 2011).

According to literature, the reason for dissatisfying quality is mostly because of lack of physician competency, which is inclusive of leadership skills (Irfan & Ijaz, 2011). To further authenticate the study a self-assessment tool concerning leadership competency in healthcare professionals, "Leadership Competency Self-Assessment (Schulich University of Medicine & Dentistry, 2016) was employed. This tool is derived and validated by The Schulich School of Medicine & Dentistry Leadership Competency Model which categorizes three leadership levels. Initially the questionnaire was made for a pilot study that evaluated leadership competencies in healthcare professionals. However, currently various studies including (Pinyosinwat & Preudhikulpradab, 2018) have utilized the questionnaire for an in depth leadership competencies analysis and organizational development. On the three Leadership levels, specific competencies have been recognized to state the specific information, abilities and aptitudes required to be an effective high performing leader.

1. Foundational Leadership (A leader who has the competency to aspire high and lead him/herself).
2. Enhanced Leadership (A leader who has the competency to lead & manage others).
3. Strategic Leadership (A leader who has the competency to lead and direct the Organization).

The Foundational Leadership level evaluates the key leadership competencies areas, consisting of: initiative, planning and organization, adaptability, agile learner, and communication. Accord-

ing to Barling, Weber and Kelloway (1996), leadership training results in significant effects on subordinates' perceptions of leaders' transformational leadership, the subordinates' own organizational commitment and increases their will to take initiatives. The results of a recent study suggest that effective planning and organization in regards to employee development (e.g. skills training, general training, and task enrichment) and creating an environment of adaptability and flexibility enhances employee involvement and are important practices in creating a high performance work climate in a health care organization (Boselie, 2010).

To elaborate further to the Foundational Leadership level, the Enhanced Leadership level evaluates the significant competency capacities of: decision making, development of others, support work performance, building team, value diversity. Physicians establish a conscious effort to coach about leadership competencies to emphasize their importance for enhancing residents' self-image, decision making, organizational performance, and potential as future leaders (Itani, Liscum & Brunicardi, 2004).

The Strategic Leadership level evaluates the competencies to lead a department and values the key competencies in the capacities of: creating vision, strategic thinking, innovation, systems thinking, results driven. Today leadership changes according to situation and it has been seen that in certain traits of leadership, there are statistically significant differences in the public and private sectors (Nawaz & Bodla, 2010). In a study conducted in Sweden, it was observed that leadership behavior varied in an analysis of data from 459 managers and there were significant differences in leadership behavior between public and private sector (Andersen, 2010).

Review of current experience indicates that, in addition to leadership training, healthcare institutions themselves are developing intramural courses to cultivate physician-leaders, however, appropriate implementation and additional attention is needed to assess the impact and effectiveness of such programs and courses in developing physician leaders and benefiting organizational outcomes (Stoller, 2008). According to a study by Biggs, Dingsdag & Roos (2008) who investigated the level of supervisory and leadership training in physicians, the respondents told of deficiencies in their training and assessment. Training curricula are provided by universities but trainees said these were often disregarded. There is a clear lack of focus on training programs during undergraduate as well as postgraduate education in health care professions, despite the evidence of improvements in leadership competencies because of such trainings (Robbins & Davidhizar, 2007).

In addition, the medical curriculum lacks focus in offering courses and modules on developing leadership skills. It is said that assessment drives learning, but our assessments at undergraduate and postgraduate levels does not assess for leadership skills, since it is not there in the curriculum (Qidwai, 2014). To enhance leadership competencies institutions need to ensure competency based training models are introduced at each stage of their professional careers starting from their medical education.

This will ofcourse, require evaluating their core competencies at undergraduate and post graduate level and evolving into their internship period, this is something practiced by the General Medical Council and Department of Health in UK GMC (Lowry, 1993).

Based on the above descriptions and cited literature, The following are the research questions for this study:

- Q1. What is the difference between the leadership competencies of physicians working at private sector hospitals and public sector hospitals?
- Q2. Do leadership trainings influence leadership competencies in physicians?
- Q3. Do leadership courses influence leadership competencies in physicians?

To address these research questions, the following hypotheses are made:

H1: There is a significant difference in physician working at public and private sector hospitals on foundational leadership competencies.

H2: There is a significant difference in physician working at public and private sector hospitals on Enhanced leadership competencies.

H3: There is a significant difference in physician working at public and private sector hospitals on strategic leadership competencies.

H4: There is a significant difference in the “Foundational leadership competencies” between Physicians working in a private sector and physicians working in a public sector having done course/s on leadership development.

H5: There is a significant difference in the “Enhanced leadership competencies” between Physicians working in a private sector and physicians working in a public sector having done course/s on leadership development.

H6: There is a significant difference in the “Strategic leadership competencies” between Physicians working in a private sector and physicians working in a public sector having done course/s on leadership development.

H7: There is a significant difference in the “Foundational leadership competencies” between Physicians working in a private sector and physicians working in a public sector having done training/s on leadership development.

H8: There is a significant difference in the “Enhanced leadership competencies” between Physicians working in a private sector and physicians working in a public sector having done training/s on leadership development.

H9: There is a significant difference in the “Strategic leadership competencies” between Physicians working in a private sector and physicians working in a public sector having done training/s on leadership development.

Research Methodology

It is a descriptive cross sectional study of a quantitative nature. Physicians working in the middle management (Senior House Officers, Medical Residents & Registered Medical Officers) of the chosen hospitals performing clinical and managerial duties were targeted. The study was conducted in the outpatient departments of private and public hospitals of Karachi, Pakistan. The researcher conveniently selected three private sector hospitals and three public sector hospitals for the study, given that the researcher had limited resources, workforce and time. Study proposal was prepared and sent to the respective Heads of Departments for approvals and ethical considerations. Since the official data could not be found, thus following an intuitive approach, the physician population was assumed to be around 200. Total 200 questionnaires were evenly distributed among public and private sector hospitals however 118 were received back, out of which 77 were from the private sector and 41 from the public sector hospitals. In order to make sure that the final sample has the sufficient power for analysis, we conducted the power analysis through G Power version 3.1 following (Aleemi, Khaliqui, & Faisal, 2018), the estimated power turned out to be 85%, which is a reasonable value for a small sample (Aleemi et al., 2018).

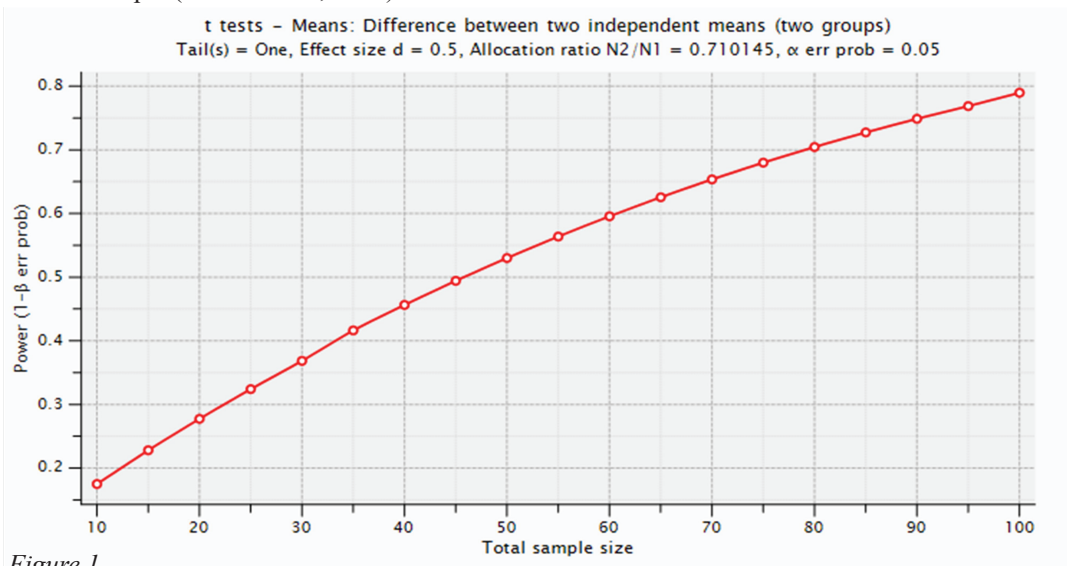


Figure 1

Procedure

A pilot study was conducted on 20 practicing general physicians who were at middle management positions. Since, no improvement in the questionnaire was needed, the principle

researcher and one assistant took the hard copies of the self-assessment questionnaires to the hospitals on permitted dates and emailed few to those physicians who were not present in those shifts. Upon seeking consent of the participating physicians, questionnaires were gotten filled in the presence of the researcher. The study holds fast to the Guidelines of the Ethical Review Process of the Institute of Business Management (IoBM). Return rate from the emailed ones was very low.

Measures

Demographic Information Form includes age, gender, hospital sector, and a question whether participants have or haven't attended leadership trainings (the action of teaching a person a skill or behavior) (Cambridge English Dictionary, 2018) and/ or leadership course (class taken to study a particular subject) (Cambridge English Dictionary, 2018). Since these variables have only two categories, all of them are dichotomous variables, except for age which is a scale variable.

Leadership Competency Self-Assessment Questionnaire, developed by the Schulich School of Medicine and Dentistry, part of Western University, Canada (Schulich School of Medicine and Dentistry, 2016) was used. This self-assessment scale instructs the respondents to rate their proficiencies in leadership competencies at three separate levels: Foundational, Enhanced, and Strategic levels. After selecting their respective Likert scale rating ranging from 0 (having no opportunity to demonstrate competency) to 5 (always demonstrating this competency) respondents then calculated their average competency ratings. Thus, the results were computed by the means of Likert scale and the internal consistency came out to be 78.

Statistical Data Analysis

The statistical analysis was done using SPSS version 21. Demographic data was summarized as frequency and percentages using descriptive statistical method. After analyzing the normality of the outcome variable the difference between the dependent variables (leadership competency levels) and the independent variables (hospital sector, and prior leadership courses and trainings) were tested through the independent t-test. All analyses were conducted at a 95% level of certainty and allowing for a margin of error of 5%.

Independent sample t-tests are commonly used in the literature to statistically test differences between means (Heeren & D'Agostino, 1987). As our research focuses on the comparison of two independent samples (Public and Private), thus we adopt the independent sample t test procedure accordingly to assess the null hypothesis that the population means in each of the two groups are equal (Landau, 2004).

Results

Table 1
Participant Demographics (N=118)

Measure	N	%
Gender		
Female	61	51.7%
Male	57	48.3%
Age		
20-24 years	6	5.1%
25-29 years	112	94.9%
Sector		
Private	77	65.3%
Public	41	34.7%
Training on Leadership		
Yes	38	32.2%
No	80	67.8%
Course on Leadership		
Yes	42	35.6%
No	76	64.4%

Out of a total 118 physicians, majority of them were females (51.7%) with an age group of 25-29 years (94.9%). According to the results, more than half of the responses were received from the private sector hospitals (65.3%), whereas when having done training/s or course/s on leadership development, majority of the respondents rated “No”, (67.8%) and (64.4%) respectively. (See table 1).

Table 2
The Mean Difference between Private and Public Sector Hospitals Physicians on Leadership Competencies

Subscale		Sector	N	M	SD	t	df	Sig.
Foundation Leadership	Initiative	Private	77	2.52	1.273	.331	116	.741
		Public	41	2.44	1.226			
	Planning and Organizing	Private	77	2.52	1.324	.626	116	.532
		Public	41	2.37	1.157			
	Agile Learner	Private	77	2.58	1.361	.658	116	.512
		Public	41	2.41	1.284			
		Private	77	2.55	1.313			

(Table Continued...)

	Communication	Public	41	2.41	1.264	.522	116	.603
		Private	77	2.51	1.294	.173	116	.863
	Adaptability	Public	41	2.46	1.267			
		Private	77	2.06	1.408			
Enhanced Leadership	Decision Making	Public	41	1.27	1.205	3.072	116	.003
		Private	77	2.10	1.527	3.247	116	.002
	Developments of Others	Public	41	1.22	1.151			
		Private	77	2.09	1.416	3.034	116	.003
	Support Work Performance	Public	41	1.29	1.250			
		Private	77	2.18	1.439	3.161	116	.002
	Building a Team	Public	41	1.32	1.368			
		Private	77	2.12	1.451	3.298	116	.001
	Value Diversity	Public	41	1.24	1.200			
		Private	77	2.49	1.861	4.225	116	.000
Strategic Leadership	Creating Vision	Public	41	1.10	1.375			
		Private	77	2.60	1.837	4.361	116	.000
	Strategic Thinking	Public	41	1.15	1.476			
		Private	77	2.61	1.865	4.274	116	.000
	Innovation	Public	41	1.17	1.482			
		Private	77	2.56	1.817	4.278	116	.000
	Systems Thinking	Public	41	1.15	1.476			
		Private	77	2.58	1.809	4.293	116	.000
	Driving Results	Public	41	1.17	1.482			
		Private	77					

In regards to the mean difference between private and public sector hospitals Physicians on Foundation leadership subscales: 1) Initiative 2) Planning and Organizing 3) Agile Learner 4) Communication and 5) Adaptability, no significant difference was found. Hence hypothesis 1 was rejected. This show the variances of both groups are same, therefore for added analyses of results variances are assumed equal. The significant difference was found on Enhanced Leadership subscales: 1) Decision Making 2) Development of Others 3) Support Work Performance 4) Building a Team and 5) Value Diversity. Moreover, significant differences were found on Strategic Leadership subscales: 1) Creating Vision 2) Strategic Thinking 3) Innovation 4) System Thinking and 5) Driving Results. Hence, the study fails to reject hypotheses 2 and 3 (See table 2).

Table 3

The Mean Difference between Physicians done Course/s on Leadership development on the Variable of Leadership Competencies

Subscale		Sector	N	M	SD	t	df	Sig.
Foundation Leadership	Initiative	Yes	42	2.50	1.174	.054	116	.957
		No	76	2.49	1.301			
	Planning and Organizing	Yes	42	2.48	1.194	.064	116	.949
		No	76	2.46	1.311			
	Agile Learner	Yes	42	2.55	1.292	.134	116	.894
		No	76	2.51	1.361			
	Communication	Yes	42	2.52	1.254	.148	116	.883
		No	76	2.49	1.322			
	Adaptability	Yes	42	2.48	1.194	-.096	116	.923
		No	76	2.50	1.332			
Enhanced Leadership	Decision Making	Yes	42	2.29	1.175	2.989	116	.003
		No	76	1.51	1.428			
	Developments of Others	Yes	42	2.33	1.356	3.063	116	.003
		No	76	1.50	1.447			
	Support Work Performance	Yes	42	2.29	1.274	2.785	116	.006
		No	76	1.55	1.418			
	Building a Team	Yes	42	2.40	1.251	2.973	116	.004
		No	76	1.59	1.507			
	Value Diversity	Yes	42	2.38	1.306	3.351	116	.001
		No	76	1.50	1.400			
Strategic Leadership	Creating Vision	Yes	42	2.95	1.681	4.500	116	.000
		No	76	1.49	1.701			
	Strategic Thinking	Yes	42	3.14	1.571	5.040	116	.000
		No	76	1.51	1.740			
	Innovation	Yes	42	3.14	1.601	4.885	116	.000
		No	76	1.54	1.762			
	Systems Thinking	Yes	42	3.07	1.552	4.836	116	.000
		No	76	1.51	1.740			
	Driving Results	Yes	42	3.05	1.529	4.565	116	.000
		No	76	1.57	1.769			

The results on mean difference between physicians done training course on leadership on Foundation leadership subscales: 1) Initiative 2) Planning and Organizing 3) Agile Learner 4) Communication and 5) Adaptability, no significant differences were found. . Hence hypothesis 4 was rejected. This show the variances of both groups are same, therefore for added analyses of results variances are assumed equal. The significant difference was found on Enhanced Leadership subscales: 1) Decision Making 2) Development of Others 3) Support Work Performance 4) Building a Team and 5) Value Diversity. Moreover, significant differences were found on Strategic Leadership subscales: 1) Creating Vision 2) Strategic Thinking 3) Innovation 4) System Thinking and 5) Driving Results Hence, the study fails to reject hypotheses 5 and 6. (See table 3).

Table 4

The Mean Difference between Physicians received Training/s on Leadership development, on the Variable of Leadership Competencies

Subscale	Training	N	M	SD	t	df	Sig.
Foundation Leadership	Initiative	Yes	38	2.45	-.263	116	.793
		No	80	2.51			
	Planning and Organizing	Yes	38	2.39	-.421	116	.675
		No	80	2.50			
	Agile Learner	Yes	38	2.47	-.290	116	.773
		No	80	2.55			
	Communication	Yes	38	2.45	-.304	116	.762
		No	80	2.53			
	Adaptability	Yes	38	2.42	-.411	116	.682
		No	80	2.53			
Enhanced Leadership	Decision Making	Yes	38	2.32	2.935	116	.004
		No	80	1.54			
	Developments of Others	Yes	38	2.39	3.173	116	.002
		No	80	1.51			
	Support Work Performance	Yes	38	2.37	3.054	116	.003
		No	80	1.55			
	Building a Team	Yes	38	2.39	2.686	116	.008
		No	80	1.64			
	Value Diversity	Yes	38	2.45	3.482	116	.001
		No	80	1.51			

(Table Continued...)

Strategic Leadership	Creating Vision	Yes	38	3.18	1.574	5.354	116	.000
		No	80	1.45	1.676			
	Strategic Thinking	Yes	38	3.37	1.441	5.851	116	.000
		No	80	1.49	1.714			
	Innovation	Yes	38	3.39	1.443	5.835	116	.000
		No	80	1.50	1.736			
	Systems Thinking	Yes	38	3.29	1.431	5.615	116	.000
		No	80	1.49	1.714			
	Driving Results	Yes	38	3.24	1.422	5.182	116	.000
		No	80	1.55	1.750			

The findings on the mean difference between physicians received training on leadership on Foundation leadership subscales: 1) Initiative 2) Planning and Organizing 3) Agile Learner 4) Communication and 5) Adaptability, no significant differences were found. Hence hypothesis 7 was rejected. This shows the variances of both groups are same, therefore for added analyses of results variances are assumed equal. These results were also in consistent with Sergiovanni & Corbally (1986) that suggests physicians are trained to match the same level of basic leadership skills by both the sectors. The significant differences were found on Enhanced Leadership subscales: 1) Decision Making 2) Development of Others 3) Support Work Performance 4) Building a Team and 5) Value Diversity. Moreover, significant differences were found on Strategic Leadership subscales: 1) Creating Vision 2) Strategic Thinking 3) Innovation 4) System Thinking and 5) Driving Results. Hence, the study fails to reject hypotheses 8 and 9. (See table 4).

Table 5
Participants (N=118)

Hospital Sector	Training	N	Courses	N
Private Sector	Yes	36	Yes	39
	No	33	No	30
Public Sector	Yes	2	Yes	3
	No	47	No	46

Analysis of the results show that out of 38 physicians who received training 36 were from the private sector whereas 3 were from the public sector. In addition, 42 physicians studied leadership courses, out of which 39 were from the private sector and 3 were from the public sector.

Discussion

This article investigates the differences between physicians working at public and private sector hospitals on leadership competencies in Karachi, Pakistan. The study results reject the hypothesis with regards to significant differences between the physician's foundational leadership with respect to public and private sectors. According to the result of the first hypothesis physicians of both public and private sectors have rated themselves almost equally in terms of having foundational leadership competencies. Foundational leadership in this study was evaluated on having an initiative, planning and organizing, agile learning, communication and adaptability. The results indicate that physicians from both the hospital sectors are proficient enough with these basic competencies most likely because they were taught so during their medical program. The Study findings by Ferlie and Shortell (2001) were also consistent with our results and concluded that having leadership competencies such as communication and networking are important in improving health care quality.

However, the study results fail to reject the second hypothesis with regards to significant differences between the physician's enhanced leadership competencies with respect to public and private sectors. There is a significant difference with respect to enhanced leadership among physicians working at the public and private sector hospitals. The findings are consistent with the Turkish study done by Top, Akdere, and Tarcan (2015) which concluded that significant differences are present between the public and private sectors with respect to development of others and valuing diversity.

The study results fail to reject the third hypothesis with regards to significant differences between the physician's Strategic leadership with respect to public and private sectors. The findings of the study further suggest significant differences between strategic leadership competencies in physicians working at public and private hospital sector hospitals. These results are consistent with the study done by Mechanic (2003) highlighting that physicians feel a lack of strategic leadership hindering in their work performance. Strategic leadership in this study evaluated creating a vision, strategic thinking, innovation, systems thinking and driving results. The results are also in line with the study conducted by Ali (2009) which concluded a significant difference between physician leadership with the reasoning that private hospitals apply vigorous teachings and strict criteria that enable them to develop physicians to become effective leaders; however they are seldom applied within the public sector thus leading to an inefficient leadership. This might be on the grounds that the medical educational framework is not highlighting in developing leaders (Bland et al. 2000). This is also supported by a study done by Varkey, Peloquin, Reed, Lindor and Harris (2009).

The study results reject the fourth hypothesis with regards to significant difference between Physicians working in a private sector and physicians working in a public sector having done course on leadership on the variable of foundational leadership competencies. Significant differences were not found between the physician's foundational leadership in public and private sector hospitals, with respect to having done leadership course/s. This is consistent with a study Ferlie and Shortell (2001)

in which no difference was found in foundational level competencies, an indicative that medical schools irrespective of the sector, usually prepare physicians with such competencies to ensure quality care is provided.

The study results fail to reject the fifth and sixth hypothesis with regards to significant difference between Physicians working in a private sector and physicians working in a public sector having done course on leadership on the variable of enhanced leadership competencies and strategic leadership competencies. Various studies, including the one by Itani et al. (2004) conclude that providing courses and emphasizing the importance of leadership trainings will enhance a physician self-image which would ultimately improve their decision making, performance, and polish their potential as future leaders. Moreover, studies Ali (2009); Chaudry, Sodha and Nur (2018), highlighted the reason that private hospitals integrate different leadership styles, whereas public hospitals rarely permit any innovation and mostly favor ordering and forceful implementations of the required results rather than motivating and providing appropriate leadership courses to the team.

The study results reject the seventh hypothesis with regards to significant difference between physicians working in a private sector and physicians working in a public sector received training on leadership development, on the variable of foundational leadership competency. As mentioned previously, medical schools train physicians with foundational leadership competencies as studies now show that improving basic leadership skills of practicing clinicians can yield superior outcomes for patients and health care delivery organizations (Blumenthal, Bernard, Bohnen & Bohmer, 2012).

However, the study fails to reject the eighth and ninth hypothesis with regards to significant difference between physicians working in a private sector and physicians working in a public sector having received training/s on leadership development on the variable of enhanced leadership competency and strategic competencies. Collins and Holton (2004) performed a meta-analysis of multiple studies and their data suggests that substantial improvements in both knowledge and skills can be attained if the right development and training is offered to the right leaders. This was in accordance to the study results of Schwartz and Pogge (2000) who highlighted that formal leadership programs as of now are either not suitable enough nor do not completely addressing the issues faced by the health sector thus making the physicians feel incompetent regarding pertinent leadership competencies specially in public sector hospitals. The study results show that physicians in the public sector felt the need to acquire essential trainings and courses to enhance their leadership competencies, in contrast to the private hospital physicians who have evaluated themselves at high rankings.

Implications and Recommendations

Implications were constructed based on the findings such as, leadership development must become one of the essential objectives of medical trainings. As the results indicate, it is a need for both the hospital sectors, especially the public sector to put their resources into preparing these

competencies keeping in mind the end goal is to produce leaders who can perform as efficient physician leaders if they get nurtured by the organizations they work and learn (McKimm & Swanwick, 2011). Therefore, medical schools and programs must endeavor to produce not only physicians but rather physician-leaders, who are capable of working as a team and will improve the enhanced leadership competency of a physician and eventually move away the physician from working solo. This can be particularly useful in the public sector hospitals since a lack of workforce tends to make physicians handling multiple cases at a time all alone, eventually leading to burnout and decreased productivity (Ahmad & Riaz, 2011). Additionally, private sector hospitals, as they tend to have an efficient utilization of resources compared to the public sector (Ali, 2009), therefore they should consider making academic positions for their physician leaders and introduce residency programs should make prospects for these leaders to educate and mentor trainees. Furthermore, as opposed to concentrating on conventional clinical themes, researchers should be urged to study the associations between successful physician leaders and patient results. The study results indicate there is a need for a customized scale for identification of specific physician competencies. Later, trainings can be conducted on the identified area of improvements. Furthermore, the study can be used to conduct additional analysis for investigating whether private sector physicians receive more opportunities to attend training and courses as compared to the public sector physicians.

Limitation of the study

One of the main limitations of this study is that the results cannot be generalized to all hospitals as the sample size needed to be larger. Both public and private hospitals have different modus operandi of leadership management and can affect the response taken during the interviews. Furthermore, in hospitals the dynamism of departments differs in nature as some areas like Emergency, OPDs, Surgical and Medicine wards are busy. During the time of data collection, few physicians were employed with other clinical duties. The study also does not address the designation and seniority level of physicians as their experience with leadership roles and opportunities may vary.

Conclusion

In conclusion the results of the study propose that in contrast with the private sector, the public sector is in need to work towards bridging this leadership gap. Besides, the study also featured that it is the need of time for the Pakistani health care framework to create physicians who are not only well versed with medical knowledge but are aware of the essential competencies to lead, efficiently manage and constantly improve to be better leaders. Careful evaluations of new and continuous leadership training programs particularly in the context of the Pakistani health care will ideally encourage the identification of procedures that do and do not yield evident improvements in our physician's leadership capabilities and improve their health care results.

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