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Exploring the impacts of personal factors on clinical leadership in a university hospital

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Abstract

Background: Clinical leadership is one of the important issues that should be carefully discussed with clinicians in the health sector.

Aims: The aim of this study was to investigate the clinical leadership qualities of physicians and nurses and to examine effect variables such as age, gender, marital status, total working time, educational level, profession, working unit, formal education on management, leadership and clinical leadership on the subdimensions of clinical leadership.

Methods: Participants included physicians and nurses working in a university hospital in Ankara, Turkey, and 261 participants responded to the research instrument. Data were collected from January to March 2016. Descriptive statistics, the significance test of difference between two means, and one-way analysis of variance were used in the data analysis.

Results: The findings revealed that total working time in the health sector and in the current working unit affect all subdimensions of clinical leadership ($p < 0.05$). Whereas the subdimension of managing services has the highest mean score, the subdimension of personal qualities has the lowest mean score in clinical leadership.

Conclusion: Clinicians must aspire to achieve professional and managerial levels, which can improve their clinical expertise and clinical leadership skills.

Keywords

clinical leadership, hospital, leadership, nurses, physicians

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Introduction

Health plays an important role in the service sector (Keklik, 2012). Organising and managing the delivery of healthcare, both at the local and regional levels and at the level of individual communication between health workers and patients, requires complex actions and responsibilities (Jonas et al., 2011). Due to the environmental and organisational complexity of the health sector, it is thought that leadership in healthcare institutions is much more difficult than in other public or private sectors (Nicol, 2012). Effective leadership is of vital importance in every level of the healthcare system in order to eliminate environmental and organisational conflicts and to ensure coordination (McAlearney, 2006).

Leadership is described as the process of influencing people to achieve goals. In the direction of these purposes, anyone working in healthcare institutions can show leadership characteristics at various times (Hartley and Benington, 2010). In particular, clinicians must be included in the leadership of the healthcare sector, which has a complex structure in all its dimensions, in order to ensure the process in this clinical environment operates in a safe, good-quality and effective way to meet the needs for delivery of healthcare and to overcome the difficulties in providing this service (Jonas et al., 2011).

The clinical leadership concept examined in this study combines leadership characteristics, such as organising the system, influencing the audience, encouraging values and using clinical experience and skills, to meet the needs of patients who constitute the main focus in the delivery of healthcare (Victorian Quality Council, 2005). According to the National Health Board (2012) in New Zealand, clinical leadership is defined as revealing behaviours that will change the system for the benefit of patients, working with clinical and managerial leaders. In other words, clinical leadership is characterised by the ability to cope with changes and with directionality (Stanley, 2013). Pepin et al. (2010: 269) defined this concept as 'a professional competency demonstrated in clinical care that galvanizes the nurse to influence others to continuously improve the care they provide'. According to Harper (1995: 11), a clinical leader is 'one who possesses clinical expertise in a specialty practice area and who uses interpersonal skills to enable nurses and other healthcare providers to deliver quality patient care'. Per Cook and Leathard (2004: 437), a clinical leader is an 'expert clinician, involved in providing direct clinical care, who influences others to improve the care they provide continuously'. Lalleman et al. (2016) define clinical leadership as the ability to influence all actors in and outside the healthcare organisation to act and enable clinical performance. These actors can be ordered to provide support and motivation, play a role in enacting organisational strategic directions, challenge processes, and possess the ability to drive and implement the vision of delivering safety in healthcare (Budak, 2018; Lalleman et al., 2017).

Clinical leadership plays a key role in providing qualified patient care and forming a healthy and safe clinical work environment. Therefore, bad practices and adverse events in healthcare services have made clinical leadership practices compulsory (Mianda and Voce, 2017). Clinical leadership has been connected with the provision of quality patient care services, building healthy workplaces, and ensuring optimal levels of work satisfaction and well-being among colleagues (Mannix et al., 2013). Clinical leadership is a requirement of hospital care, which includes system performance, achievement of health-reform objectives, timely care delivery, system integrity and efficiency, and is an integral component of the healthcare system (Daly et al., 2014). In a similar way, some scientific studies claim the attributes that shape a clinical leader include the use of clinical expertise and abilities, collaboration, interpersonal effective communication and coordination of care to support the health and well-being of patients (Boamah, 2017; Patrick et al., 2011).

According to Stanley (2017), the main attributes of clinical leaders are approachability, empowerment and motivation, as well as being visible in practice, clinically competent and clinically knowledgeable, possessing the appropriate values and beliefs, along with effective communication skills and being someone who copes well with change, has integrity, is supportive, inspires confidence and is a positive clinical role model. That is why clinical leadership by staff nurses and physicians is necessary in medical practice, as it improves the efficiency and sustenance of care processes that utilise the healthcare team and delivery of ideal patient care (Chavez and Yoder, 2014). And, if clinical leadership is to become of a higher standard and more widely practised, all clinicians need to develop a greater understanding of the structure of the healthcare services, including organisations, funding and governance, together with the influential internal and external forces (Cohen et al., 2017; Warren and Carnall, 2011).

Within the scope of the National Health Service (NHS), a leadership model was developed in 2008 under the name of the Medical Leadership Competency Framework. This model explains the leadership and management skills that physicians will need during the planning, delivery and conversion processes of healthcare services (NHS, 2010b). In July 2010, the Clinical Leadership Competency Framework, which demonstrates the leadership stages that clinicians have shown in their professional practice and has similarities with the occupational stages for almost every clinician, was created (NHS, 2010a). The Clinical Leadership Competency Framework is based on the concept of 'shared leadership'; it includes not only the concrete leadership skills determined for people, but also the sense of responsibility that must be present on behalf of the success of the service unit and organisation. Accordingly, leadership characteristics and actions can be seen at different times and in any clinician in the organisation. These characteristics should focus on the success of the group rather than personal success. Therefore, shared leadership actively supports effective teamwork (NHS, 2011). In this direction, there are five domains that a clinical leader must have and that determine the area of the job of clinical leaders by putting delivery of service into the centre: demonstrating personal qualities, working with others, managing services, improving services and setting direction (NHS, 2010b).

Methods

Aim

The aim of this study to investigate the clinical leadership qualities of physicians and nurses and examine the effects of variables such as age, gender, marital status, total working time and educational level, profession, working unit, formal education on management, leadership and clinical leadership on the subdimensions of clinical leadership.

Sampling

The population surveyed in the study consists of physicians and nurses ($n = 1218$) working in a university hospital in Ankara, Turkey. The data collection tool was distributed to all physicians and nurses willing to participate in the study and 261 usable questionnaires were obtained. Data were collected by the present researchers between January and March 2016.

Data-collection method

The Clinical Leadership Scale developed by the NHS in 2012 is used to measure clinical leadership and was adapted to Turkish by Budak (2016). This scale consists of 40 items and

5 subdimensions (personal qualities, working with others, managing services, improving services and setting direction). The items are rated on a 3-point Likert scale (almost never = 1, sometimes = 2, almost always=3). The internal consistency coefficient for this scale (Cronbach's alpha) was 0.92 in the present study. In addition, internal consistency coefficients of subdimensions were found to vary between 0.66 and 0.79.

Ethical considerations

The study was approved by the Ethics Committee of Hacettepe University in accordance with its decision numbered 35853172/433-3248. Potential participants were given a document outlining that participation was voluntary and that collected data would be used solely for scientific purposes. Informed consent was obtained from each participant of this study.

Analysis of data

All statistical analyses were performed using the SPSS Programme. The significance test of the difference between the two means and one-way analysis of variance (ANOVA) were used to investigate whether there are differences in the variables examined. The Tukey test was used to determine the differences between units. The level of significance was set at 0.05.

Results

Table 1 shows that 52.1% of the participants were 30 years old or younger, 75.9% were female, 78.9% had an undergraduate educational level, 54.0% of them were married and 75.1% of them were nurses. The table demonstrates that 37.2% of the participants had been working in the health sector for 8 years or more and 48.7% of them had been working in their current units for 8 years or more. Most of the participants were working in services or outpatient clinics. In addition, many of the participants did not receive formal education on management (63.6%), leadership (75.9%) or clinical leadership (86.2%).

Considering the basic statistics about study variables in Table 2, it stands out that managing services (20.54 ± 2.86) had the highest average and personal qualities (18.25 ± 2.30) the lowest average among the clinical leadership subdimensions (Table 2).

In Table 3, considering the results of the *t*-test and ANOVA, which compare the personal qualities scores of the participants with respect to various variables, participants' 'personal qualities' subdimension scores are observed to reveal statistically meaningful differences with respect to age ($t = -3.369$; $p = 0.001$), educational level ($t = -4.040$; $p = 0.000$), profession ($t = 2.070$; $p = 0.039$), time working in the health sector ($F = 17.876$; $p = 0.000$) and time working in the current unit ($F = 11.448$; $p = 0.000$). According to this, participants who were 31 years old or above, had a postgraduate educational level, were a physician, and had worked for 8 years or more in the health sector and in the current unit had higher personal qualities subdimension scores.

Participants' 'working with others' subdimension scores are observed to reveal statistically meaningful differences with respect to age ($t = -2.864$; $p = 0.005$), marital status ($t = 1.993$; $p = 0.047$), gender ($t = 3.008$; $p = 0.003$), educational level ($t = -2.312$; $p = 0.022$), time working in the health sector ($F = 16.904$; $p = 0.000$) and time working in the current unit ($F = 11.403$; $p = 0.000$). According to this, participants who were 31 years old or above, married, female, had a postgraduate educational level and had worked for 8

Table 1. Descriptive characteristics of participants.

Variables	*N*	%
Age (year)		
≤30	136	52.1
≥31	125	47.9
Gender		
Female	198	75.9
Male	63	24.1
Educational level		
Undergraduate	206	78.9
Postgraduate	55	21.1
Marital status		
Single	120	46.0
Married	141	54.0
Profession		
Physician	65	24.9
Nurse	196	75.1
Total working time in health sector (years)		
≤3	84	32.2
4–7	80	30.7
≥8	97	37.2
Total working time in the current working unit (years)		
≤3	63	24.1
4–7	71	27.2
≥8	127	48.7
Working unit		
Emergency	30	11.5
Operating room	40	15.3
Service/outpatient clinic	191	73.2
Formal education on management		
Yes	95	36.4
No	166	63.6
Formal education on leadership		
Yes	63	24.1
No	198	75.9
Formal education on clinical leadership		
Yes	36	13.8
No	225	86.2

Table 2. Mean and standard deviations values regarding research variables.

Variables	Mean	SD	Minimum	Maximum
Personal qualities	18.25	2.30	11	21
Working with others	20.39	2.81	10	24
Managing services	20.54	2.86	12	24
Improving services	20.42	2.82	10	24
Setting direction	20.09	2.67	11	24

SD: standard deviation.

Table 3. The views of the respondents on clinical leadership subdimensions according to individual characteristics.

Variables	PQ		WO		MS		IS		Setting Direction	
	M	SD	*M*	SD	*M*	SD	*M*	SD	*M*	SD
Age										
≤30	17.79	2.43	19.92	2.85	20.25	2.87	19.97	2.83	19.65	2.73
≥31	18.74	2.05	20.90	2.70	20.85	2.82	20.91	2.74	20.56	2.54
	$t=-3.369$; **$p=0.001$**		$t=-2.864$; **$p=0.005$**		$t=-1.696$; $p=0.091$		$t=-2.726$; **$p=0.007$**		$t=-2.770$; **$p=0.006$**	
Marital status										
Married	18.35	2.28	20.71	2.66	20.60	2.84	20.57	2.88	20.26	2.73
Single	18.12	2.33	20.02	2.95	20.46	2.89	20.25	2.75	19.88	2.60
	$t=-0.778$; $p=0.437$		$t=1.993$; **$p=0.047$**		$t=-0.407$; $p=0.685$		$t=-0.905$; $p=0.366$		$t=-1.143$; $p=0.254$	
Gender										
Female	18.36	2.16	20.68	2.68	20.78	2.59	20.63	2.71	20.11	2.56
Male	17.87	2.67	19.48	3.04	19.78	3.48	19.78	3.07	20.02	3.01
	$t=1.478$; $p=0.141$		$t=3.008$; **$p=0.003$**		$t=2.444$; **$p=0.015$**		$t=2.093$; **$p=0.037$**		$t=0.246$; $p=0.806$	
Educational level										
Undergraduate	17.96	2.39	20.18	2.91	20.38	2.96	20.26	2.91	19.96	2.71
Postgraduate	19.33	1.52	21.16	2.26	21.15	2.34	21.04	2.37	20.56	2.50
	$t=-4.040$; **$p=0.000$**		$t=-2.312$; **$p=0.022$**		$t=-1.788$; $p=0.075$		$t=-1.828$; $p=0.069$		$t=-1.489$; $p=0.138$	
Profession										
Physician	18.75	1.91	20.34	2.58	20.58	2.83	20.21	2.86	20.21	2.82
Nurse	18.08	2.40	20.41	2.89	20.52	2.87	20.49	2.81	20.05	2.63
	$t=2.070$; **$p=0.039$**		$t=-0.173$; $p=0.863$		$t=0.157$; $p=0.876$		$t=-0.679$; $p=0.498$		$t=0.442$; $p=0.659$	

Table 3. Continued

Variables	PQ		WO		MS		IS		Setting Direction	
	M	SD	*M*	SD	*M*	SD	*M*	SD	*M*	SD
Total working time in the health sector (years)										
≤3 (1)	17.12	2.57	19.06	3.05	19.23	2.97	18.98	2.97	18.90	2.81
4–7 (2)	18.51	2.14	20.67	2.43	20.91	2.65	20.59	2.47	20.31	2.17
≥8 (3)	19.00	1.77	21.32	2.46	21.36	2.53	21.54	2.40	20.93	2.58
	$F = 17.876$; $\mathbf{p = 0.000}$ 1–2; 1–3		$F = 16.904$; $\mathbf{p = 0.000}$ 1–2; 1–3		$F = 15.039$; $\mathbf{p = 0.000}$ 1–2; 1–3		$F = 21.714$; $\mathbf{p = 0.000}$ 1–2; 1–3;2–3		$F = 14.708$; $\mathbf{p = 0.000}$ 1–2; 1–3	
Total working time in the current working unit (years)										
≤3 (1)	17.30	2.38	19.29	2.81	19.37	2.86	19.09	2.91	18.78	2.79
4–7 (2)	17.96	2.44	19.97	2.93	20.44	3.02	20.32	2.61	19.99	2.42
≥8 (3)	18.87	1.98	21.17	2.52	21.17	2.57	21.13	2.66	20.80	2.51
	$F = 11.448$; $\mathbf{p = 0.000}$ 1–3; 2–3		$F = 11.403$; $\mathbf{p = 0.000}$ 1–3; 2–3		$F = 9.023$; $\mathbf{p = 0.000}$ 1–3		$F = 11.985$; $\mathbf{p = 0.000}$ 1–2; 1–3		$F = 13.204$; $\mathbf{p = 0.000}$ 1–2; 1–3	

*$p < 0.05$.

PQ: personal qualities; WO: working with others; MS: managing services; IS: improving services; M: mean; SD: standard deviation.

years or more in the health sector and in the current unit, had higher 'working with others' subdimension scores.

Participants' 'managing services' subdimension scores are observed to reveal statistically meaningful differences with respect to gender ($t = 2.444$; $p = 0.015$), time working in the health sector ($F = 15.039$; $p = 0.000$) and time working in the current unit ($F = 9.023$; $p = 0.000$). According to this, participants who were female and had worked for 8 years or more in the health sector and in the current unit had higher 'managing services' subdimension scores.

Participants' 'improving services' subdimension scores are observed to reveal statistically meaningful differences with respect to age ($t = -2.726$; $p = 0.007$), gender ($t = 2.093$; $p = 0.015$), time working in the health sector ($F = 21.714$; $p = 0.000$) and time working in the current unit ($F = 11.985$; $p = 0.000$). According to this, participants who were 31 years old or above, female and had worked for 8 years or more in the health sector and in the current unit had higher 'improving services' subdimension scores.

Finally, participants' 'setting direction' subdimension scores are observed to reveal statistically meaningful differences with respect to age ($t = -2.770$; $p = 0.006$), time working in the health sector ($F = 14.708$; $p = 0.000$) and time working in the current unit ($F = 13.204$; $p = 0.000$). According to this, participants who were 31 years old or above and had worked for 8 years or more in the health sector and in the current unit had higher 'setting direction' subdimension scores.

Table 4 compares participants' scores of clinical leadership subdimensions according to various variables, such as receipt of formal education on management, leadership and clinical leadership. According to this, it was found that participants' personal qualities subdimension scores ($t = -2.059$; $p = 0.040$), their managing services subdimension scores

Table 4. The views of the respondents on clinical leadership subdimensions according to education on management, leadership and clinical leadership.

	PQ		WO		MS		IS		Setting Direction	
Variables	*M*	SD	*M*	SD	*M*	SD	*M*	SD	*M*	SD
Formal education on management										
Yes	18.60	2.31	20.65	2.79	20.89	2.52	20.93	2.73	20.57	2.41
No	18.04	2.28	20.24	2.82	20.33	3.02	20.13	2.84	19.81	2.78
	$t = -1.894$;		$t = -1.138$;		$t = -1.537$;		$t = -2.203$;		$t = -2.213$;	
	$p = 0.059$		$p = 0.256$		$p = 0.125$		$\mathbf{p = 0.028}$		$\mathbf{p = 0.028}$	
Formal education on leadership										
Yes	18.76	2.37	20.81	2.72	21.16	2.48	21.08	2.59	20.60	2.61
No	18.08	2.26	20.26	2.83	20.34	2.94	20.21	2.87	19.92	2.68
	$t = 2.059$;		$t = 1.358$;		$t = 1.997$;		$t = 2.140$;		$t = 1.763$;	
	$\mathbf{p = 0.040}$		$p = 0.176$		$\mathbf{p = 0.047}$		$\mathbf{p = 0.033}$		$p = 0.079$	
Formal education on clinical leadership										
Yes	18.14	2.85	20.22	3.06	20.28	3.44	20.22	3.03	20.14	2.51
No	18.26	2.21	20.42	2.78	20.58	2.76	20.45	2.80	20.08	2.70
	$t = -0.298$;		$t = -0.387$;		$t = -0.584$;		$t = -0.456$;		$t = 0.123$;	
	$p = 0.766$		$p = 0.699$		$p = 0.559$		$p = 0.649$		$p = 0.903$	

*$p < 0.05$.

PQ: personal qualities; WO: working with others; MS: managing services; IS: improving services; M: mean; SD: standard deviation.

($t = 1.997$; $p = 0.047$) and their improving services subdimension scores ($t = 2.140$; $p = 0.033$) are observed to reveal statistically meaningful differences with respect to receiving formal education on leadership ($p < 0.05$). In addition, it was found that participants' improving services subdimension scores ($t = 2.203$; $p = 0.028$) and setting direction subdimension scores ($t = -2.213$; $p = 0.028$) reveal statistically meaningful differences with respect to receiving formal education on management. Accordingly, participants who received a formal education on management and leadership had higher scores than those who did not.

Discussion

This study has investigated the clinical leadership qualities of physicians and nurses and examined the effects of variables such as age, gender, total working time, marital status and educational level on the subdimensions of clinical leadership. The fact that there are limited studies investigating the clinical leadership qualities of clinicians in the literature is also an important indicator of the need for scientific studies related to this field.

According to the results obtained in the study, participants' clinical leadership qualities were found to be at quite high levels in all subdimensions. Especially in recent years, similar results were achieved in leadership research for nurses working in the healthcare system in Turkey (Duygulu and Kublay, 2008; Öztürk et al., 2012; Serinkan and İpekçi, 2005) and results for the leadership characteristics of nurses as clinicians were found to be quite high.

According to the age of the clinicians who participated in the study, statistically meaningful differences were found among the subdimensions of personal qualities, working with others, improving services and setting directions. In similar studies (Canpolat, 2012; Delice and Günbeyi, 2013; Mosadeghrad and Ferdosi, 2013), the age variable did not seem to affect the leadership characteristics, whereas in others (İbicioğlu et al., 2009) it was found to affect leadership characteristics as in this study.

Further, this study found a meaningful relationship between the marital status of the clinicians and the working with others subdimension; no meaningful relationship was found among the other clinical leadership characteristics. In a similar study conducted by Bakan (2008) on the relationship between leadership types and demographic characteristics, no meaningful relationship was found between participants' leadership types and their marital status. Moreover, in other studies conducted on health management and clinicians (Canpolat, 2012; Ebrahimzade et al., 2015; Mosadeghrad and Ferdosi, 2013), no meaningful relationship was determined between the leadership characteristics of health directors or clinicians and their marital status.

Statistically meaningful differences were found between the gender variable of clinicians and working with others, managing services and improving service subdimensions, which were included in clinical leadership dimensions. Similarly, further recent studies (National Center for Healthcare Leadership, 2016; NHS, 2011) attempted to reveal female leadership characteristics in the healthcare field, namely that women have stronger leadership characteristics than men in both managerial and emotional intelligence.

It was seen that the education-level variable of the clinicians in the study affected personal qualities and working with others among clinical leadership subdimensions and did not affect managing services, improving services and setting direction. In a study conducted by Tengilimoğlu and Yiğit (2005) on a group of healthcare workers, including clinicians, no meaningful relationship was found between the level of education of healthcare workers and leadership behaviours. Uğurluoğlu et al. (2013) concluded that leader–member

interaction in the educational status variable did not affect the leader–member interaction subdimensions of nurses.

It was seen that the profession group characteristics of physicians and nurses participating in the study affected only personal qualities among clinical leadership subdimensions and not the other subdimensions. In leadership studies on clinicians, similarly equivalent studies (Goodal, 2011; Martin et al., 2011; British Medical Association, 2012; Bohmer, 2012; NHB, 2012; Bohmer, 2013; Stoddart et al., 2014) on leadership characteristics of physicians and nurses have been conducted; in these studies, the clinical leadership characteristics of physicians were brought into the foreground at the beginning, whereas in recent times it has been emphasised that clinicians should have equal leadership characteristics in the framework of shared leadership rather than some being superior to others.

Meaningful statistical differences were found between the working time of clinicians included in the study, in the health sector and their current units, and in all clinical leadership subdimensions. In the leadership study conducted by Keklik (2012) in a private hospital in Turkey's healthcare system, a meaningful relationship was found between total working time in the institution and types of leadership; moreover, according to the National Health Professional Research report carried out in New Zealand by the NHB (2012), the overall working time of clinicians in their profession affected their clinical leadership characteristics. In research conducted by Asiabar et al. (2015) on health managers, a variable result was obtained between the total working time in this profession, which can also be defined as professional experience, and leadership qualities. Accordingly, the effect of total time working in the profession on leadership characteristics varies according to the type of leadership.

The status of clinicians participating in the study in regard to receiving a formal education on management was found to affect improving services and setting direction among the clinical leadership subdimensions, whereas the status of receiving formal education on leadership was found to affect personal qualities, managing services and improving services. When these results are associated with the literature, management education that will be given to clinicians is expected to affect the subdimensions in regard to managerial activities, rather than overall clinical leadership characteristics of clinicians (British Medical Journal, 2013; George Washington University, 2018). In the study conducted by Canpolat (2012) on nurses in Turkey's healthcare system, no relationship was found between leadership education received and clinical leadership characteristics. However, many education programmes for leadership are organised for clinicians (mostly nurses) in the scope of the healthcare system in Turkey. The relevant international literature (e-Learning for Healthcare [e-LH – e-Learning for Healthcare], 2018; The Governance Institute, 2009; The King's Fund, 2015) stated that clinicians' leadership education will affect characteristics related to general leadership behaviours among the subdimensions of clinical leadership characteristics, even if not all of them. Because education and evaluation standards around the world are now very high, medical education has changed radically and its status has increased significantly (Tweedie and Dacre, 2017). This result is not supported by NHS clinical leadership model studies (NHS, 2010a, 2011) or by other international clinical leadership studies (Royal College of Nursing, 2004; Victorian Quality Council, 2005; Warren and Carnall, 2010). In this study, although 13.8% of clinicians stated that they received clinical leadership education, it is believed that there was no knowledge about the scope and content of this education and that this result of not being supported by

international literature and studies can be explained, considering that no serious clinical leadership education is provided both by universities and the health sector in Turkey's health and education systems.

Conclusion

As in other leadership theories, clinical leadership puts the concept of 'shared leadership' into the centre and is based on this concept rather than on a leader and his/her audience. One of the most important features distinguishing clinical leadership from other leadership theories is that it includes not only the concrete leadership characteristics determined for people, but also the sense of responsibility that must be present on behalf of the success of service units and organisations. Accordingly, leadership characteristics and actions can be seen at different times and in any clinician in the organisation rather than a specific person, that is, clinical leadership characteristics typically focus on group success rather than personal success. Therefore, shared leadership actively supports effective teamwork.

Considering the results of the data analysis obtained by implementing the Clinical Leadership Scale in the study, it was seen that the average scores of each subdimension constituting the clinical leadership characteristics within the study were quite high. Again, according to the results, it was seen that clinicians' status of receiving formal education on management and clinical leadership, marital status, education level and profession group did not significantly affect the clinical leadership characteristics, as demonstrated by clinicians; and that age, gender, time working in the health sector, and current units and status of receiving a formal education on leadership significantly affected clinical leadership characteristics, as demonstrated by clinicians.

According to the study results, it is suggested that clinicians must aspire to the professional and managerial levels that can improve their clinical expertise and clinical leadership skills. In addition, it is recommended that there should not be any professional classification in terms of superiority among clinicians by making a mistake such as providing superiority to physicians or nurses. In this context, it is important for clinicians (physicians, nurses) to consider each other as equal stakeholders with the same characteristics of delivery of healthcare services both in the clinical system and the healthcare system as a whole in terms of shared clinical leadership.

Key points for policy, practice and/or research

- Clinical leadership characteristics of the clinicians in the study were quite high. Total working time in the health sector and in the current working unit affected all subdimensions of clinical leadership in nurses and physicians.
- This study suggests that clinicians should be willing to aspire to the relevant professional and managerial levels to improve clinical leadership skills, such as being role models, acting as team spokespersons, and managing resources effectively, and accountibility, as well as clinical expertise.
- Nurses and physicians need to consider each other as equal stakeholders in the delivery of healthcare services.
- Future studies should give more consideration to understanding the effect of socio-demographic characteristics on clinical leadership.

Limitations

This study includes clinicians working in a university hospital in a province in Turkey. Therefore, the results of the study cannot be generalised to all clinicians. It may be useful to study in different regions and different hospitals in order to generalise the topic.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Ethics

The study was approved by Ethics Committee of Hacettepe University in accordance with its decision numbered 35853172/433-3248.

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