Determination of the Managerial Competencies of Clinical Nurse Managers: Self-Assessment*

Klinik Yönetici Hemşirelerin Yönetsel Yetkinliklerinin Belirlenmesi: Öz Değerlendirme

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Abstract

Aim: In this study, it was aimed to evaluate the managerial competencies of clinical nurse managers.

Method: This descriptive study was conducted with 120 clinical nurse managers working in three different hospitals. Data were collected using the Personal Information Form and the Nursing Supervisor Competency Evaluation Inventory.

Results: It was determined that the competence levels of clinical nurse managers differed according to the institutions they were employed in, their managerial experiences, and how they were addressed by their subordinates. In this study, the Cronbach's alpha coefficient of the inventory was 0.97, the total mean score was 202.75 (SD=17.73), the mean score of the overall unit management subscale was 99.69 (SD=8.73), the mean score of the staff management subscale was 67.26 (SD=6.18), and the mean score of the management of care subscale was found to be 35.79 (SD=3.46).

Conclusion: The level of management competencies of clinical nurse managers was found to be high. It was determined that the competence levels differed according to the institutions they were employed in, their managerial experiences, and how they were addressed by their subordinates.

Keywords: Nurse, nurse manager, competence.

Öz

Amaç: Bu çalışmada klinik yönetici hemşirelerin yönetsel yetkinliklerini belirlemek amaçlanmıştır.

Yöntem: Tanımlayıcı tipte olan bu çalışma, bir şehir hastanesi, bir kamu üniversite hastanesi ve bir özel üniversite hastanesi olmak üzere üç farklı hastanede çalışmakta olan 120 klinik yönetici hemşiresi ile yapıldı. Veriler, "Kişisel Bilgi Formu ve Servis Sorumlu Hemşiresi Yönetsel Yeterlik Değerlendirme Ölçeği" ile toplandı.

Bulgular: Yönetsel yetkinliğin; çalışılan kuruma, yöneticilik deneyimine ve astları tarafından hitap edilme şekillerine göre farklılık gösterdiği bulundu. Ölçeğin bu çalışmadaki Cronbach alfa değeri 0,97, ölçek toplam puan ortalaması 202,75 (SS=17,73), Genel Ünite Yönetimi alt boyut puan ortalaması 99,69 (SS=8,73), Personel Yönetimi alt boyut puan ortalaması 35,79 (SS=3,46) olarak saptandı.

Sonuç: Klinik yönetici hemşirelerin yönetsel yetkinlik düzeyleri yüksek bulundu. Yönetsel yeterliğin çalışılan kurum, yöneticilik deneyimi ve astları tarafından hitap edilme şekline göre farklılık gösterdiği belirlenmiştir.

Anahtar Sözcükler: Hemşire, yönetici hemşire, yetkinlik.

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Introduction

Changes in patient care and treatment methods have accelerated the changes in the nursing profession and the roles of clinical nurse managers in terms of keeping up with the contemporary developments (Adigüzel et al., 2011; Chase, 2012). With the increase in the responsibilities and authority of the nurses, their independent roles and functions have also increased (Adigüzel et al., 2011; Gedük, 2018). In addition to the roles of caregiving, training, research, management, decision-making, defense, and career development in contemporary nursing, we also encounter the roles of ensuring communication and coordination, as well as rehabilitation and counseling. These roles have made important contributions to the development and professionalization of the profession (Casey et al., 2019; Salmond and Echevarria, 2017). The role of clinical nurse managers, which was integrated with other nursing roles, includes tasks such as patient care, training activities, communication, clinic operations, and management (Gedük, 2018).

Nursing services management is a system of coordinated activities that provides nurses with the necessary resources (tools, space, time, workforce, etc.) to realize the goals and policies of the institution. Therefore, management in nursing services requires special knowledge, abilities, and effective communication skills (Van Houwelingen et al., 2016). Patient care services and the activities related to nursing in nursing services management require responsibilities at the upper, middle, and lower levels (Alan and Baykal, 2018; Baykal and Harmancı, 2014).

Clinical nurse managers are primarily responsible for developing nursing care services and adapting to changing healthcare services. They also have a critical management role in providing effective, high-quality patient care. Clinical nurse managers are in a position to greatly affect the success of the health institution due to their authority and responsibilities (Chase, 2012). For this reason, it is extremely important to determine the strengths and weaknesses and success levels of the clinical nurse managers in charge of the service in terms of achieving individual and institutional goals. In order to determine and improve the success levels of clinical nurse managers, it is necessary to evaluate the level of competence related to management (Duygulu and Kublay, 2008; Karaalp et al., 2013). For this reason, it is important to determine the managerial competencies of the clinical nurse managers who play a key role. When the literature is examined, there are very few studies on this subject in Turkey (Karadaş et al., 2017; Sökmen and Baykal, 2007). For these reasons, this study was conducted.

Method

Design and Purpose of the Research: In this descriptive research, it was aimed to evaluate the management competencies of the clinical nurse managers.

Research Questions:

- What are the levels of managerial competencies of clinical nurse managers?
- Does the level of managerial competencies of clinical nurse managers differ according to socio-demographic variables?
- In which areas do the clinical nurse managers consider themselves competent and incompetent?

Location and Time Period of the Research: The research was conducted in two university hospitals (public and private) and one public hospital (city hospital) between 15/03/2018 and 27/07/2018.

Population and Sample of the Research: The population of the research consisted of a total of 151 clinical nurse managers, 59 working in a public university hospital, 62 working in a public (city) hospital, and 30 clinical nurse managers working in a private university hospital. It was calculated to reach at least 113 participants as a result of the sample calculation whose universe is known. A total of 120 clinical nurse managers, 37 from the university hospital, 54 from the public hospital, and 29 from the private hospital agreed to participate in the research and constituted the sample. Clinical nurse managers, who were on sick-leave and annual leave or did not agree to participate in the research, were not included in the study; therefore, 79.4% of the population was reached. These hospitals were selected because they are also training and research hospitals.



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Data Collection: The Personal Information Form prepared by the researchers and the Nursing Supervisor Competency Evaluation Inventory (NSCEI) were used to collect the data. The Personal Information Form consisted of 20 questions that were predicted to affect the demographic and managerial competencies of the clinical nurse managers.

The NSCEI was developed by Sökmen in 2005. The NSCEI is a 5-point Likert-type scale and consists of 45 statements that are scored between 1 and 5 (1-1 am not competent at all, 5-1 am very competent). In the scale, the nursing service clinical managers were evaluated in three managerial subscales. The General Unit Management subscale consisted of 22 statements (min. 22, max. 110 points), the Personnel Management subscale consisted of 15 statements (min. 15, max 75 points); and the Care Management subscale consisted of eight statements (min. eight, max. 40 points). The minimum total score of the scale was 45 and the maximum total score was 225; the Cronbach alpha coefficient was 0.95.

Data Evaluation: SPSS (IBM SPSS Statistics 23.0) program was used in the statistical analysis of the data. Categorical measurements were summarized in numbers and percentages, while the continuous measurements were summarized as mean, standard deviation, and minimum-maximum. When comparing the continuous measurements between the groups, the distributions were checked with the Shapiro-Wilk test, and the independent-samples t-test was performed to compare the variables, and ANOVA analysis was used for more than two variables. In order to determine the source of the difference between the statements that were identified as statistically significant as a result of the ANOVA analysis, the Tukey HSD test was used. The statistical significance level was taken as p<0.05 in all tests. The Cronbach alpha coefficient of the NSCEI was found to be 0.97.

Ethical Aspect of the Research: In order to conduct the study, the ethics committee permission was obtained from the Non-Interventional Clinical Research Ethics Committee of the researchers' institution (date and number: 06.07.2018/72) and written permissions were obtained from all relevant institutions. Before the clinical nurse managers who participated in the study were given the data form, they were informed, and their verbal consent was obtained.

Limitations of the Research: The findings obtained from the study include clinical nurse managers who worked in three hospitals in Adana and agreed to participate in the research. Therefore, the results cannot be generalized.

Findings

The total mean score of the scale was 202.75 (SD=17.73), the mean score of the overall unit management subscale was 99.69 (SD=8.73), the mean score of the personnel management subscale was 67.26 (SD=6.18), and the mean score of the management of care subscale was 35.79 (SD=3.46).

The mean age of the participants was 39.99 years (SD=5.95), 93.0% of which were female, 75.0% were married, and 65.8% were RNs (registered nurses). In terms of the working environments of the participants, it was found that 45.0% were working in a public hospital (city hospital), 32.0% were working as a nurse for 11-15 years, 46.7% were working as a manager nurse for 1-5 years, 33.3% were working in surgical services, and 63.3% had meetings with their subordinates once a month. It was determined that the mean working experience of the participants in the profession was 12.98 (SD=7.22) years, and the mean working time as a clinical nurse manager was 7.64 (SD=6.57) years. In the clinic where they worked as managers, it was found that the mean number of beds was 23.34 (SD=15.23), the mean number of nurses they worked with was 16.08±13.30, the mean number of patients per nurse was 7.21 (SD=5.60) during the day and 9.20 (SD=8.25) at night. It was determined that 54.2% of the participants took sufficient annual leave each year and 52.5% of them were addressed as "Mr./Ms." by their subordinates. It was found that 92.5% of the participants were informed about the current legal regulations concerning nursing services, 99.2% of them were aware of the duties, authority and, responsibilities of the people they worked with, and 67.5% did not receive any postgraduate training in management (Table 1).





Table 1. Characteristics of the study participants (N:120)

Characteristics of participants		n	%
Gender	Male	8	6.70
	Female	112	93.30
Age	25-35 age	26	21.7
	36-40 age	43	35.8
	41-45 age	29	24.2
	46 and over age	22	18.3
Marital status	Single	30	25.0
	Married	90	75.0
Level of education	Health vocational high School	14	11.7
	Associate degree	12	10.0
	Undergraduate	79	65.8
	Master / doctorate	15	12.5
Institution he/she is working at	University hospital	37	30.8
· ·	Private hospital	29	24.2
	Public hospital	54	45.0
Experience in the profession	0 – 5 years	19	15.8
	6 – 10 years	30	25.0
	11 - 15 years	32	26.7
	16 - 20 years	21	17.5
	21 years and over	18	15.0
Clinic	Surgical Clinic	48	40.0
	Internal Medicine Clinic	45	37.5
	Other	27	22.5
Management experience	1 – 5 years	56	46.7
	6 - 10 years	33	27.5
	11 years and over	31	25.8
The number of nurses he/she manages	0 – 10 nurses	49	40.8
	11 - 20 nurses	50	41.7
	21 nurse and over	21	17.5
Can you use enough annual leaves every year?	Yes	65	54.2
,	No	55	45.8
How subordinates address	Name	12	10.0
Tow Substantates address	Mr./Ms.	63	52.5
	Sister/Brother	16	13.3
	Other	29	24.2
Number of meetings with subordinates (month)	0	12	10.0
Number of freedings with subordinates (month)	1	76	63.3
	2	22	18.3
	3 and over	10	8.4
Do you know about the current legal regulations	Yes	111	92.5
concerning nursing services?	No	9	7.5
Do you have information about the duties. authorities.	Yes	119	99.2
responsibilities of nurses?	No	1	0.8
Have you received a training on management?	Yes	39	32.5
have you received a training on management?		81	
	No	٥١	67.5





Table 2. Comparison of participants' working environment with NSCEI and its sub-dimensions (N:120)

	General Unit Management	Personnel Management	Care Management	Overall Scale Mean Score
_	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
The hospital where he/she works				
^a University Hospital (n:37)	100.59 (9.35)	67.94 (6.57)	36.27 (3.69)	204.81 (18.74)
^b Private Hospital (n:29)	102.41 (7.95)	69.24 (5.24)	36.41 (3.54)	208.06 (16.25)
^c Public Hospital (n:54)	97.61 (8.55)	65.74 (5.97)	35.12 (3.45)	198.48 (17.04)
Test significance	p=0.042* F=3.258 b>c	p=0.034* F=3.483 b>c	p=0.165 F=1.830	p=0.043* F=3.237 b>c
Management experience				
^a 1-5 years (n:56)	96.98 (9.54)	66.35 (6.40)	35.10 (3.69)	197.44 (18.97)
⁶ 6-10 years (n:33)	101.54 (7.28)	68.84 (5.37)	36.15 (3.29)	206.54 (15.17)
°11 years and over (n:31)	102.61 (7.24)	69.03 (5.73)	36.64 (3.03)	208.29 (15.54)
Test significance	p=0.005** F=5.571 b, c>a	p=0.006** F=5.379 b, c >a	p=0.109 F=2.256	p=0.007** F=5.103 b, c>a
How subordinates address				
^a Name (n: 12)	92.00 (4.95)	62.41 (5.17)	33.91 (2.39)	188.33 (11.75)
^b Mr./Ms. (n:63)	101.41 (7.91)	68.07 (5.82)	36.19 (3.48)	205.68 (16.70)
°Sister/Brother (n:16)	100.37 (8.79)	68.12 (6.16)	36.00 (3.52)	204.50 (17.88)
dOther (n:29)	98.75 (10.05)	67.03 (6.66)	35.58 (3.65)	201.37 (19.50)
Test significance	p=0.006** F=4.411 b>a	p=0.030* F=3.093 b>a	p=0.213 F=1.521	p=0.017* F=3.542 b>a

^{*}p<0.05, **p<0.01

When the differences between the NSCEI total scores of the participants were compared according to the hospital they work in, it was found that the participants working in the public hospital had lower mean scores in the total scale and mean scores in the subscales than the participants working in other hospitals. The difference between the groups was found to be statistically significant (F:3.237 p<0.05). When the source of the statistical difference was examined, it was found that the participants working in private hospitals perceived themselves as competent at higher rates in General Unit Management, Personnel Management, and the mean score of the total scale compared to the participants working in public hospitals (Table 2).

It was found that as the nurses got more experienced as managers, the mean scores of all subscales and total scale were also found to increase. The differences between the groups were found to be statistically significant (F:5.103 p<0.05). The reason for the statistical differences between the groups was examined and it was determined that the subscale mean scores of the employees who had been working as managers for 1-5 years were lower than the mean scores of those who had been working as managers for 6-10 years (p<0.05) and 11 years or more (p<0.01) (Table 2).

The way the participants were addressed by their subordinates in the service where they worked was analyzed and it was found that the mean scores of the participants who were called by their names were lower than the mean scores of the nurses in other groups in all subscales and the total scale. The differences between the groups were found to be statistically significant (p<0.05). When the reason for the statistical differences between the groups was analyzed, it was found that the mean scores of the participants that were addressed as "Mr./Ms..." in the services they worked were higher than the mean scores of the participants addressed by their names in General Unit Management, Personnel Management subscales and the mean score of the total scale (Table 2).



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Table 3. Comparison of participants' educational status and status of receiving management training with NSCEI and sub-dimensions (N:120)

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	General Unit Management	Personnel Management	Care Management	Overall Scale Mean Score
_	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Educational degree				
Health vocational high school (n:14)	103.78 (7.48)	69.64 (6.55)	37.21 (3.01)	210.64 (16.53)
Associate degree (n:12)	96.83 (10.43)	65.91 (6.96)	35.00 (3.78)	197.75 (20.49)
Undergraduate (n:79)	100.05 (7.87)	67.41 (5.65)	35.81 (3.24)	203.27 (16.05)
Master / doctorate (n:15)	96.26 (11.32)	65.33 (7.59)	35.00 (4.51)	196.60 (22.96)
Test significance	p=0.77 F=2.345	p=0.247 F=1.395	p=0.290 F=1.265	p=0.132 F=1.910
Receiving Management Training				
Yes (n=39)	101.79 (7.73)	67.76 (5.67)	36.38 (3.28)	205.948 (16.19)
No (n=81)	98.67 (9.04)	67.02 (6.43)	35.50 (3.53)	201.209 (18.32)
Test significance	p=0.67	p=0.539	p=0.195	p=0.171
Total (n:120)	98.35 (8.87)	68.12 (6.09)	36.27 (3.56)	202.75 (17.73)

When the difference between the NSCEI total scores and subscales is examined according to postgraduate management education experience, it was determined that the mean scores of the participants who received management training after graduation were higher than the mean scores of the participants who did not receive training after graduation. However, there was no statistically significant difference between them (p>0.05) (Table 3).

When the differences between the NSCEI total scores and subscales are examined according to the educational status of the participants, the mean scores of the participants who graduated from the vocational high school of health were higher than the mean scores of the ones who had associate, undergraduate, and postgraduate degrees. However, it was found that the difference between them was not statistically significant (p>0.05) (Table 3).

When the mean scores of the participants in the General Unit Management subscale were examined, the statement with the highest mean score was "I can ensure the maintenance, repair, and availability of the equipment and materials used." (\bar{x} =4.74, SD=0.45). The second statement with the highest mean score was "I can periodically check the equipment and materials at the unit (fixture tracking)." (\bar{x} =4.73, SD=0.46). The third statement with the highest mean score was "I can ensure that emergency medicines and supplies are always available for use." (\bar{x} =4.72, SD= 0.47). In this subscale, the statement with the lowest mean score was "I can make changes to improve nursing services." (\bar{x} =4.23, SD=0.74).

When the mean scores of the participants in the Personnel Management subscale were examined, the statement with the highest mean score was "I can prepare the working charts of the nurses." (\overline{x} =4.78, \overline{SD} =0.44). The second statement with the highest mean score was "I can provide the orientation to nurses who have just started working in the unit." (\overline{x} =4.70, \overline{SD} =0.48)). The third statement with the highest mean score was "I can make the distribution of labor/duties in accordance with the job descriptions of the group for which I am responsible." (\overline{x} =4.64 (\overline{SD} =0.53). The statement with the lowest mean score in this subscale was "I can plan the future tasks/careers of my employees" (\overline{x} =3.81, \overline{SD} =0.96).

When the mean scores of the participants in the Care Management subscale were analyzed, the statements with the highest mean scores were "I can evaluate the quality of nursing care" and "I can ensure coordination in all emergency and routine patient care practices" (\overline{x} =4.63, SD=0.501). The statement with the lowest mean score in this subscale was "I can ensure the use of scientific methods in nursing care (nursing process, common care plans, etc.)." (\overline{x} =4.28, SD=0.69).

Discussion

The level of managerial competencies of clinical nurse managers may affect quality of the patient care and, accordingly, the perception of the institution before the society. Since the service would qualify to meet the expectations as the competence level increases, it could be mentioned that the satisfaction levels of the service users and the reliability of the institution could increase. The fact that the mean score of the total scale and the subscale obtained in this study were close to the maximum values and were higher than the similar studies in the literature supports the high level of



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managerial competence of the participants (Flatekval and Corbo, 2019; Gunawan and Aungsuroch, 2017; Karadaş et al., 2017; Warshawsky and Cramer 2019).

There was no statistically significant difference between the levels of managerial training experience of the participants and their managerial competence. However, the mean scores of those who received training in management were found to be higher than those who did not receive any training in all subscales. In a rapidly changing world, it is not possible for an educational institution to provide the knowledge, skills, habits, and attitudes sufficient for a lifetime, permanently and in a short period of time. As a result of the constant changes in the world and living conditions, human beings as dynamic entities need continuous learning (Alan, 2016; Morris, 2019). In a study conducted with managers, it was stated that the information obtained in management training affected professional achievement positively, many of these information were used in the profession and they helped to find solutions to the professional problems experienced (Ramazani and Jergeas, 2015). Therefore, it can be stated that clinical nurse managers in lower-level management positions are required to receive management/management-specific training in the constantly evolving and changing health services.

There was a significant difference between the hospitals where the participants worked and their NSCEI total mean scores as well as the subscales; and the mean score of the participants working in the private hospital was found to be higher than those working in the public hospitals. In a study, it was determined that nurse managers working in private hospitals provided more support to their subordinates (AbuAlRub et al., 2009). In another study, it was found that nurses working in private hospitals had higher mean scores in the leadership dimensions (Top et al., 2015). In a similar study, it was found that the level of managerial competence of clinical nurse managers working in a private hospital was higher than those working in a public hospital (Karadaş et al., 2017). These results, which were in favor of the private hospitals, were also supported in this study. It can be stated that private hospitals place more emphasis on managerial competence in the selection of clinical nurse managers.

In this study, it was found that the level of managerial competence increased as the experience of nurses as managers increased. In a similar study, no relationship was found between managerial experience and managerial competence, while in another study, nurses with 16 years or more managerial experience were found to have high levels of managerial competence (Karadaş et al., 2017; Sökmen and Baykal, 2007). Similarly, in the studies, managerial experience highly affected managerial competence (Chase, 2012; Park and Faerman, 2019). As the experiences of the clinical nurse managers increased, they had greater command of their field. It was stated that they communicated more effectively, their persuasion skills improved, they worked more carefully and systematically, and they fulfilled the given tasks completely (Alan and Baykal, 2018).

In this study, the high rate of using Mr./Ms. When addressing the clinical nurse managers indicated that the relationship between the seniors and the subordinates was at the professional level. In feudal societies, the formal way of addressing is an important factor in interpersonal relationships. It is used to classify individual distances. This situation, which is also referred to as an indicator of social relations, may lead to the disappearance of formality and the emergence of status confusion In the senior-subordinate relationship after a while.

In the General Unit Management subscale, the statements with the highest mean scores were "I can ensure the maintenance, repair, and availability of the equipment and materials used.", "I can check the tools and equipment in certain intervals. (fixture tracking)" and "I can ensure that emergency medicines and materials are always available for use." respectively. The high scores obtained from this subscale in similar studies show that clinical nurse managers consider themselves quite competent in terms of technical skills and they work in compliance with the regulations (Karadaş et al., 2017; Sökmen and Baykal, 2007). The statement with the lowest mean score in this subscale was "I can make changes to improve nursing services.". There may be several reasons for this result, such as incompatibility of authorities and responsibilities, resistance to change, excessive workload, and organizational culture. Clinical nurse managers are in a position to facilitate the innovation required in nursing services (Karadaş et al., 2017). Therefore, clinical nurse managers need to be supported in order to ensure the necessary innovation and change (González Garcia et al., 2020; Thompson et al., 2012).

In the Personnel Management subscale, the statements with the highest mean scores were "I can prepare the working charts of the nurses.", "I can provide the orientation of the nurses who have just started the unit.", and "I can make the division of labor/duties in accordance with the job description of the group I am responsible for.". Similar studies support these results and show that clinical nurse managers consider themselves competent in these areas (Karadaş et al., 2017; Sökmen and Baykal, 2007). In this study, the three statements with the highest scores in this sub-dimension were related to the clinical routines. Preparing a work schedule within the general operations comes first among the duties and responsibilities of clinical nurse managers. In general, clinical nurse managers are expected to know the duties, authorities,



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and responsibilities of the staff they supervise. Therefore, obtaining high scores on these statements can be interpreted as an expected outcome. The statement with the lowest mean score in this subscale was "I can plan the future duties/careers of my staff". Regardless of their duties and positions, nurses need to be supported in their individual and professional development (Whitehead et al., 2013). However, a study found that the area in which the nurses experienced the most problems in terms of management was due to intense workload and working hours (Alghamdi, 2016). Due to the heavy workload, nurse managers may ignore career plans for themselves and their subordinates. As a matter of fact, nurses, regardless of their ranks, must ignore their individual desires, needs, and development. We can explain this situation as a reflection of the altruism that exists in the nature of the profession.

The statements with the highest mean scores were "I can evaluate the quality of nursing care" and "I can provide coordination in all emergency and routine patient care applications" in the Care Management subscale, respectively. It was determined that the statement with the lowest mean score in this subscale was "I can ensure the use of the scientific method in nursing care (nursing process, joint care plans, etc.). In a similar study, the highest and lowest mean scores were obtained from the care management subscales (Sökmen and Baykal, 2007). These findings showed that clinical nurse managers consider themselves quite competent in evaluating the quality of nursing care and ensuring coordination in patient care practices.

In this study, the three areas in which the clinical nurse managers felt most incompetent were making changes, planning the career of employees, and using scientific methods. Based on these findings, it can be stated that the participants perceived themselves as incompetent in the areas of leadership, coaching/mentoring, and research.

Conclusion and Recommendations

In this study, the levels of managerial competence of clinical nurse managers were found to be high. It was determined that the competence levels varied in terms of the institutions they were employed in, their managerial experiences, and how they were addressed by their subordinates. In this study, the three areas in which the clinical nurse managers felt the most incompetent were making changes, planning the career of employees, and using scientific methods. Three areas where the clinical nurse managers felt the most competent were work schedule preparation, control of equipment, and materials in the service; and maintenance, repair, and availability of the equipment and materials used in the service.

Considering the results of this study, it is recommended that the educational status and professional experience related to management should take into consideration by the senior management when appointing the clinical nurse managers and that the clinical nurse managers should be supported by the top management in terms of management training that is required to keep up with the innovations and developments.

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Ethics Committee Approval: Çukurova University Non-Interventional Clinical Research Ethics Committee approval was obtained (Date: 06.07.2018 - Number: 72).

Conflict of Interest: Not declared.

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Informed Consent: Informed consent of the participants were obtained.

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Klinik yönetici hemsirelerin yönetsel yetkinlikleri



References

AbuAlRub, R., Omari, F. & Al-Zaru, I. (2009). Support, satisfaction and retention among Jordanian nurses in private and public hospitals. *International Nursing Review, 56*(3), 326-332. https://doi.org/10.1111/j.1466-7657.2009.00718.x

Adigüzel, O., Tanrıverdi, H. & Özkan, D. S. (2011). Occupational professionalism and the case of nurses as the members of the profession. Journal of Administrative Sciences, 9(2), 235-260.

Alan, C. (2016). A Research about effectiveness of the peer mediation education in the schools in Turkey. *International Journal on Lifelong Education and Leadership*, 2(1), 1-9.

Alan, H. & Baykal, U. (2018). Personality characteristics of nurse managers: The personal and professional factors that affect their performance. *Journal of Pshychiatric Nursing*, 9(2), 119-128. https://doi.org/10.14744/phd.2017.08870.

Alghamdi, M. G. (2016). Nursing workload: A concept analysis. *Journal of Nursing Management*, 24(4), 449-457. https://doi.org/10.1111/jonm.12354

Baykal, Ü. & Harmancı, A.K. (2014). Management process and organization of nursing services. In Ü. Baykal, E. Türkmen (Eds.), *Nursing Services Management*. İstanbul: Akademi Basın ve Yayıncılık.

Casey, M., O'Connor, L., Cashin, A., Fealy, G., Smith, R., O'Brien, ... & Glasgow, M. E. (2019). Enablers and challenges to advanced nursing and midwifery practice roles. *Journal of Nursing Management*, 27(2), 271-277. https://doi.org/10.1111/jonm.12697

Duygulu, S. & Kublay, G. (2008). Nurse managers and their staff nurses' assessment on leadership and nurse managers leadership characteristics. *Journal of Hacettepe University Faculty of Nursing*, 15(1), 1-15.

Chase, L. K. (2012). Are you confidently competent? *Nursing Management*, 43(5), 50-53. https://doi.org/10.1097/01.NUMA.0000413646.50095.e4

Flatekval, A. M. & Corbo, S. A. (2019). Nurse manager self-reported competency levels. *Nursing Management*, 50(2), 28-33. https://doi.org/10.1097/01.NUMA.0000552739.87072.a5

Gedük, E. A. (2018). Developing roles of the nursing profession. *Journal of Health Science and Profession*, 5(2), 253-258. https://doi.org/10.17681/hsp.358458

González García, A., Pinto-Carral, A., Sanz Villorejo, J. & Marqués-Sánchez, P. (2020). Nurse manager core competencies: A proposal in the Spanish Health System. *International Journal of Environmental Research and Public Health*, 17(9), 3173. https://doi.org/10.3390/ijerph17093173

Gunawan, J. & Aungsuroch, Y. (2017). Managerial competence of first-line nurse managers: A concept analysis. *International Journal of Nursing Practice*, 23(1), e12502. https://doi.org/10.1111/ijn.12502

Karaalp, T., Teke, A. & Çelen, Ö. (2013). Evaluation of managerial success levels of managers: The case of military hospitals. *Gülhane Medical Journal*, 55(4), 253-260.

Karadaş, A., Duran, S. & Doğu, Ö. (2017). Determining competency levels of nursing supervisors: The examples of Balıkesir and Sakarya. *Mersin University Journal of Health Sciences*, 10(1), 54-64.

Morris, T. H. (2019). Self-directed learning: A fundamental competence in a rapidly changing world. *International Review of Education*, 65(4), 633-653. https://doi.org/10.1007/s11159-019-09793-2

Park, H. H. & Faerman, S. (2019). Becoming a manager: Learning the importance of emotional and social competence in managerial transitions. *The American Review of Public Administration*, 49(1), 98-115. https://doi.org/10.1177/0275074018785448

Sökmen, S. & Baykal, Ü. (2007). Analysis of managerial educational requirements of service head nurses in public hospitals of Istanbul. *Journal of Anatolia Nursing and Health Sciences*, 10(4), 1-11.

Thompson, R., Wolf, D. M. & Sabatine, J. M. (2012). Mentoring and coaching: A model guiding professional nurses to executive success. *JONA: The Journal of Nursing Administration*, 42(11), 536-541. https://doi.org/10.1097/NNA.0b013e31827144ea

Top, M., Akdere, M. & Tarcan, M. (2015). Examining transformational leadership, job satisfaction, organizational commitment and organizational trust in Turkish hospitals: Public servants versus private sector employees. *The International Journal of Human Resource Management*, 26(9), 1259-1282. https://doi.org/10.1080/09585192.2014.939987

Ramazani, J. & Jergeas, G. (2015). Project managers and the journey from good to great: The benefits of investment in project management training and education. *International Journal of Project Management*, 33(1), 41-52. https://doi.org/10.1016/j.ijproman.2014.03.012

Van Houwelingen, C. T., Moerman, A. H., Ettema, R. G., Kort, H. S. & ten Cate, O. (2016). Competencies required for nursing telehealth activities: A Delphi-study. *Nurse Education Today*, *39*, 50-62. https://doi.org/10.1016/j.nedt.2015.12.025

Warshawsky, N. & Cramer, E. (2019). Describing nurse manager role preparation and competency: findings from a national study. *The Journal of Nursing Administration*, 49(5), 249-255. https://doi.org/10.1097/NNA.00000000000000746

Whitehead, B., Owen, P., Holmes, D., Beddingham, E., Simmons, M., Henshaw, L... & Walker, C. (2013). Supporting newly qualified nurses in the UK: A systematic literature review. *Nurse Education Today*, 33(4), 370-377. https://doi.org/10.1016/j.nedt.2013.01.009