

Exploring the Human Factors Affecting Health Service Managers: A Qualitative Study

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Abstract

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BACKGROUND: In recent decades, managing health-service systems has faced multiple challenges. Identifying and resolving these challenges promote the efficiency and effectiveness of hospital activities.

AIM: The present study aimed to explore the human factors affecting health service managers.

MATERIAL AND METHODS: In this qualitative study, in-depth unstructured interviews were conducted with 29 employees who were in close contact with the health service managers. All the interviews were transcribed verbatim. Data were collected using purposeful sampling and were analysed using conventional content analysis via MAXQDA software.

RESULTS: A group of 29 participants were interviewed (male 65.5%, female 34.4%). "Managing managers" has been identified as the primary theme with four supporting secondary themes including the inappropriate appointment of managers, the impact of human and social needs of managers, influential employees, and disrupting organisational communications. These are the challenges faced by managers in managing human resources in health-service organisations.

CONCLUSION: Results showed that employees manage their managers within the organisation so that they can prevent managers from concentrating on their management affairs and tasks resulting in the distortion of management practices. The results of this study can help the key policy makers and planners in health-service organisations to guide the organisation to pursue its goals through appointing appropriate managers and identifying influential employees.

Introduction

Managing health-service systems have faced multiple challenges in recent decades. Identifying and resolving these challenges can promote the efficiency and effectiveness of organisation activities [1]. It is currently believed that the most challenging health-service systems issue today is the issue of management [2] so that the efficiency and effectiveness of health-service systems depend to a great extent on the management and effective use of resources in that organisation [3]. The management and role of health-care system managers in improving the quality of health care are of paramount importance [4]. Arguably, management is one of the most

important, complex and difficult knowledge nowadays [5], [6]. It is a process by which different resources are organised for achieving a goal [7]. The main objective of management in health-service systems is to provide health services of high quality [3], [7]. Health-service systems' managers are often responsible for planning, budgeting, managing human resource, and monitoring service quality [8]. Improvement and promotion of health-service systems require strengthening the capacity of managers [9] because health-service systems' managers can promote communication among various components of the health system and can provide human relationships within the organisation and among different system factors [10]. By developing and exploiting their inner abilities, knowledge and work experience, the competent and knowledgeable managers can realise

the goals of the organisation through recruiting the least amount of possible resources in the best way and improving the effectiveness and efficiency of the organisation [11]. Human resource is arguably the most important component of the organisation at the managerial and non-managerial levels and has been recognised as the main factor in success or failure of the organisation in achieving maximum productivity [7]. It has been reported that human resource communication plays a significant role in the systematic analysis of factors, affecting the organisation's management system and makes a major contribution towards optimising the performance of human resources in achieving organisational productivity [12]. The role of managers in the coordination of human resource functions is highlighted in reaching the overall goals of the system [13]. Managers of health-service systems face multiple challenges and obstacles for managing these important and complex organisations. These problems include lack of proper policy making [14], structural problems of universities¹ and managerial instability [12]. Although extensive research has been carried out on the classification of the duties and skills that managers needed, far too little attention has been paid to human factors influencing management [8], [15], [16], [17]. Human factors are effective in the management of the topic managers, which is less considered. Therefore, there is a strong need for managers' analysis as an important and influential factor in the human resources of organisations.

Regarding the culture of management, which deals with the administration of human affairs [18], this phenomenon requires its comprehensive examination in the cultural context to identify the factors that influence it. Considering that quantitative research does not have the flexibility and depth to understand and explain the depth and accuracy of the views and experiences of individuals [19]; therefore, it is necessary to deeply analyse this issue using appropriate tools such as qualitative research. Thus, this study aimed to explore the human factors affecting health service managers.

Material and Methods

This qualitative study was performed using conventional content analysis — this study conducted at Mazandaran University of Medical Sciences, Sari, Iran, in 2017. The participants (n = 29) were employees working at Mazandaran University of Medical Sciences, who were in contact with the health service managers. The participants were selected using purposeful sampling. The inclusion criteria were at least one year of working experience in close contact with the health service managers. To obtain a wide range of experiences and views, sampling was

performed using the maximum variance approach [20], from both sexes with different roles and responsibilities within the organisation and management experience. Data were collected using unstructured interviews with open-ended questions such as "What are the perceived human factors that affect health service managers?" Then, to clarify the details and improve the depth of the interview content, probing questions such as "Please explain more", why and how? " were asked. Data collection and analysis were done simultaneously. When data saturation was achieved, the interview process was discontinued due to the duplicated data. The interviews were conducted individually in a quiet room at a hospital or university. The time and location of the interview were determined by employees' agreement. The duration of the interview varied between 20 to 90 minutes.

Data analysis was carried out according to the content analysis approach proposed by Graneheim and Lundman [21]. Immediately after each interview, the interviews were transcribed word by word. Then, to gain a general sense of the data, the text of the interview was repeatedly read out and analysed before the next interview. The interview transcripts were read line by line, and their semantic units were extracted and coded. Codes with similar meanings were subsumed under the more general categories of secondary themes based on similarity and relevance. Finally, the analysis process was completed by identifying the main elements of the process. MAXQDA software was used to manage the data.

To verify the accuracy of the results, four criteria of credibility, dependability, confirmability and transferability were taken into consideration [19]. Credibility and dependability are activities that improve the ability to believe and accept, as well as the stability of the results. The researcher has been involved in the subject for a long time and allocated enough time to collect data. That is, the researcher was present as an employee at the University of Medical Sciences; this helped him to gain the trust and acceptance of the participants and understand their experiences. Also, member check was done through 3 employees to increase the credibility of data. To improve the credibility and dependability of the collected data, we used maximum variance sampling among the employees with work experience, organisational posts, as well as different organisations supervised under the university.

Meanwhile, the researcher provided a transparent description of the research steps taken from the start in order to ensure the reliability of the data. Conformability is an agreement about the accuracy, relevance and meaning of the data. To ensure this criterion, accurate review and external checking as member of the research group analyzed the data. Transferability describes the process of applying and generalizing the results of research in one situation to other similar situations; therefore, the results were detailed in order to allow its use in similar

environments. It should be noted that this study was approved by the University Ethics Committee. The researcher provided some explanations for the participants regarding the purpose of the study, voluntary participation, as well as study exclusion. Written informed consent was obtained from all participants for participation in the research and recording the interviews.

Results

In total, 29 interviews were conducted. Nineteen participants were male, and eight were female, and their age range was between 28 to 63 years (work experience ranges between 4 to 22 years). Using the constant comparative analysis, "managing manager" was identified as the primary theme with four supporting secondary themes including "inappropriate appointment of managers", "impact of human and social needs of managers", "influential employees" and "disrupting organisational communications". These themes demonstrate the barriers of the proper management faced with health-service managers (Table 1).

Table 1: Main and secondary factors affecting the managing of managers

Main Theme	Secondary Theme	Category
Managing managers	Inappropriate appointment of managers	Inadequate managerial and organizational components lack of focus on the organisation's affairs and tasks
	Impact of human and social needs of managers	The need for belonging and love The need for respect and value from the staff
	Influential employees	The need for security and trustworthiness Experienced employees Employees engaged in close relationships with management
	Disrupting organizational communications	Application of employee communication tips Appointment of consultants based on the relationships

Inappropriate appointment of managers

Inadequate management components refer to the individual and organisational characteristics of managers that are necessary for the management of health-service systems. This concept involves personality traits and a lack of focus on the organisation's affairs.

Inadequate managerial components

Components such as impact, uncertainty and inadequate managerial authority are considered factors are influencing the managers' ability to manage. Also, the appointment of inexperienced managers with lack of necessary technical knowledge and organisational affairs skill are among the most important factors for managing the managers within

the organisations. It is axiomatic that having a high degree of power, decisiveness and authority is considered one of the main requirements of management among the managers in case of necessity. However, the lack of these personal characteristics will certainly cause great inefficiencies for the manager, and consequently, the manager is rarely able to use the best of his management authority or exercise effective control over his or her subordinates. In this regard, one interviewer (with 8 years of experience) commented: "*When the manager doesn't have the inherent talent, skill or insight for management this implies that he is unable to show the ability to make decisions quickly and effective or does not have strong personality and easily lose against his employees*" (P.19).

Lack of focus and concentration on organisational affairs

Along with the personality traits of managers, managers need to focus on organisational issues and devote a lot of time and energy for better and more efficient management of organisational affairs. On the contrary, if a manager possesses adequate power and personal authority, but does not devote a lot of time and energy for managing the organisational affairs, he may lack necessary competence and core skills needed for managing the organisational affairs. Therefore, he has no choice but to obey his subordinates. One of the participants (with 12 years of experience) commented: "*It is very important for the manager to possess sufficient knowledge and required expertise as well as the level of mastery in his career...Nevertheless, if the manager has sufficient knowledge and necessary skills but can manage multiple tasks simultaneously; surely, he is unable to devote sufficient time to the organisation's affairs, for example, a cardiothoracic surgeon is appointed as the chief of hospital. It is certain that this person does not have a strong sense of responsibility to handle varied tasks simultaneously*" (P.4).

Human and social needs of the manager

Human and social needs of manager display the managers' willingness to get more acceptance from the employee. This notion encompasses the need for belonging, being loved, respect, value and the sense of security as well as reassurance in the manager by the employee.

The need for belonging and love by the employee

The desire for belonging and love is a human need that affects the manager. Some managers converge their emotions and interests with employees by focusing on their interests and try to be accepted

by their employees rather than perform their respective and assigned duties. In these situations, while paying special attention to the individual manager's characteristic traits, the employees try to recognise the strengths and weaknesses of the manager accurately and constantly remind them to the manager. As a result, they struggle to build up a strong sense of belonging, being together and love so that they can gradually bring managers under their control to ultimately achieve their intended goals. One of the interviewees (with 6 years of experience) alluded to the notion: *"The manager is also a human and has, of course, his own special social needs... He, like any other person, likes to be accepted in public... But a manager can oversee or manage his employee successfully if he was able to sustain a limitation of intimacy and privacy with his subordinates"* (P. 15).

The need for respect and value from the employee

One of the factors influencing managers is disguising the respect and feeling valued for managers through the inflated and exaggerated respect, praise and flattery, showing gratitude and appreciation even for the least important things, instilling the feeling of being the best manager with an emphasis on having high academic talent and capability on behalf of the employees. By exploiting this human need, they can influence his management practices, and as a result, they can accomplish their goals more easily. One interviewee (with 11 years of experience) expressed the belief that: *"Some managers can be easily influenced by flattering employees. I have worked with a manager who easily ignored the poor performance of his subordinates just by expressing some compliment or admiration sentences from the employees (say: "whatever you say sir")"* (P 9).

The need for security and assurance

If managers failed to fulfil their security requirements by using desirable ways, this could set the grounds for other individuals and in-power groups to exercise their control. The employees struggle to provide a sense of security for the vulnerable managers through displaying loyalty and support for the manager, lack of receiving criticism from the employees, lack of presenting organisation's problems and failing to express dissatisfaction or complaint. Adopting the solutions mentioned above helps the employees to draw the manager's attention and gradually exercise their control over their manager's actions and consequently, realise their defined objectives.

In this regard, one of the participants with 20 years of experience commented: *"When the employees report to their manager that everything is*

going well inside the organisation and it works out in your favour; it seems that there is no problem. Surely, something is wrong. My experience has shown me that these managers take a strong stance against the criticism and lack of job security and therefore, deceive their employees by concealing managerial challenges and problems" (P 28).

Influential employees

Influential employees refer to those employees who can influence managers within the organisation because of their expertise, work experience and holding position within the organisations. This concept applies to employees with work experience and a history of direct and close contact with management.

Experience employees

This category refers to a group of employees with a long work history and usually had a previous management experience within the organisation. They tarnish or harm the scientific knowledge and practical capability of the manager by relying on their knowledge and expertise and hurt their performance. An interviewee with 4 years of experience pointed out: *"A manager with insufficient knowledge or experience cannot make decisions quickly and effectively against employees with a long work history ... Due to the lack of expertise, he is forced to surrender to higher-level professionals for decision making and other issues to move the system forward"* (P.19).

Employees holding key positions to the management

This category refers to people within the organisation who hold key positions to the management providing access to information and decision-making processes, and have had work experience with managers who were able to manage them.

In this respect, one of the participants with 22 years of experience said: *"Employees holding key positions to the manager can easily affect the decisions of the manager by giving biased and sometimes false information. In these organisations, the manager does not play an integral role in moving the organisation forward and takes no responsibility or liability except signing the letters and announcements"* (P.29).

Disrupting organisational communications

Disrupting organisational communications are described as factors affecting the managing of managers and involves using the communication tricks (tips) by the employee and the appointment of

advisers based on the relationships within the organisation.

Application of communication tips

Communication tricks are used by individuals and groups that attempt to influence the managers. They include taking the lead in greetings and respect for the manager, establishing eye contact, approving the manager's speech using non-verbal sign, pretending, showing, and doing things differently.

One of the interviewees with 10 years of experiences expressed the belief that: *"In the 10 years I have worked closely with the doctor (the manager's name), I understood that he (manager) has no fault...we have employees who are able to impose their wills upon the manager using communication techniques such as (whatever you say is true; but with regards, I think that). They stand on ceremony with the manager and finally, prove their own words"*.

Appointment of consultants based on relationships

Furthermore, inaccurate and faulty selection of consultant managers and ambiguity in their limits of authority may hurt the managerial decision-making ability, and the manager can be inadvertently dominated by the surrounded employees. As a result, these situations may cause a lot of difficulties for the manager; it may negatively impact the manager's concentration ability and decisions making the process can easily become bogged down, and this may set the conditions for the interference by other people. One of the participants with 18 years of experience said: *"During the management of the doctor (doctor's name), his counsellor managed all the affairs, not the doctor. Many people imposed their wills and decisions upon the manager and even sometimes issued a notification instead of the manager"* (P 2).

Discussion

According to the results of this study, the inadequate appointment of managers, the impact of the managerial and human needs of the managers, human and social needs of managers, influential employees and disrupting organisational communications have been identified as the human factors affecting the health-service systems managers. These factors conceptualised as "Managing Managers" by employees. A possible explanation for this might be related to the fact that some employees try to influence their managers by using mechanisms and techniques. These actions are

incompatible with the common targeted organisational frameworks and procedures and can violate the appropriate approaches used for employee communication with managers. Also, they can gradually become tools for dominating and manipulating the manager by the subordinate staff. In other words, the employees "manage" their manager instead of being managed by their manager. The employees manage the manager and adjust his manager's behaviours, decisions and policies for their benefit. The appointment of inexperienced managers without adequate technical knowledge and out-of-organization is one of the most important factors in managing managers within the organisations. The majority of scholars in management science believe that the managers' beliefs and attitudes have a direct impact on their behaviour, and the managers' behaviour has a significant effect on their internal organisational performance as well [8], [22], [23]. In other words, managers need skills to protect them from being "managed" [24]. Also, the environment of health-service systems makes it necessary for us to have these skills in the twenty-first century [9]. The managers' belief in the effective role of managerial capabilities is considered one of the main prerequisites for its successful implementation and is of paramount importance as a first step in achieving the goals of the organisation [17]. Therefore, also, to possess adequate knowledge and skills in their career path, managers must be able to develop dynamic capabilities and try to constantly strengthen their managerial capacities [9], [25]. The human and social needs of managers are another factor for affecting the managing of managers. The desire for belonging and to be loved by employees is another important factor involved in the satisfaction and motivation of managers that is used by the subordinators embedded in the phenomenon of "human and social needs". Indeed, the need for belonging and loving components have been classified as the main components of basic needs and motivational factors both in the hierarchy of Maslow's needs and McClelland's motivational theory [7]. Further, the results of our study demonstrated that the need for respect and appreciation is another important source of satisfaction and motivation, which has been introduced in the Maslow Needs Hierarchy as respect esteem and received attention in Skinner as well as Deci and Ryan theories [26].

It was also found that the need for security and reassurance is a human need that is used to manage managers and to disguise the respect and feeling valued for managers through the inflated and exaggerated respect and praise is considered as an important factor in drawing the individual's attention based on the Maslow Needs Hierarchy and other motivational/psychological theories. Meanwhile, the presence of influential employees is another factor in managing managers. An implication of this possibility is that the influence of inter-organizational individuals or groups (including the old staff deployed and

organized in the form of inter-agency groups), the existence of a conflict between the individual and organizational interests all shift the attention towards the provision of personal interests through non-formal procedure [27] and might lead the employees to exercise their control over the manager. This interfering influence on manager's decisions and policies, on the one hand, and "managing" the manager for personal and collective interests, on the other hand, is one of the most decisive ways to achieve those benefits. In this regard, researchers demonstrated the use of experienced workforce and structural problems as the main challenges faced by the managers. Since the responsible and efficient workforce is considered the most important assets for an organisation [28], [29], identifying the influential employees can improve their efficiency and realise their goals in line with organisational objectives. The next important and effective factor in managing the managers is disrupting organisational correlations. The results of our study revealed that the human nature of inter-organisational forces, their behaviours, reactions, relationships, which have been regarded as "human communication", can make a significant contribution to the quality of the employee's performance and managers in general, and organisational goals in particular. In this regard, recognising the "communication system" and its pathological analysis to optimise its performance in the organisation seem to be necessary [30].

Additionally, "managing" managers by employees will lead to changes in the procedures, performance and macro and micro operating levels of planning inside the organisation and finally makes the organisation deviate from the established and normal course of the program's mainstream organisation. This disruption is dangerous for the organisation because the managers, who play the primary role within the organisation, monitor employee's performance and guide the organisation in the direction of the assigned mission, are the main source giving rise to this disruption within the organisation. Therefore, organisational productivity is negatively affected, and the efficiency and productivity growth will be lost within the organisation [31].

To the best of our knowledge, this is the first qualitative study to consider specifically human factors influencing management in health-service systems in Iran. The use of content analysis methods used here is ideally placed to understand the complexity of the interaction between managers, organisation activities, health-service systems environment and human factors. The findings are specific to the people involved in this study; however, the use of content analysis allows themes to transcend beyond basic description and to resonate with other similar situations and locations.

In conclusion, the results of this study provide a broad range of context-specific human factors that can affect the management of health service

managers and can lead to their inefficient management. Since managing the managers is influenced by personality factors of both manager and employee; therefore, it is recommended that in addition to enhancing concentration and accuracy towards the managerial personality traits, management work experience should be carefully analyzed for selecting health service managers in terms of exercising appropriate managerial authority to prevent the creation of a managing the manager phenomenon.

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References

1. Martins JM, Isouard G, Freshman B. Human dimension of health service management. *Aust Health Rev.* 2017.
2. Young TK, Chatwood S. Delivering more equitable primary health care in Northern Canada. *CMAJ.* 2017; 189(45):E1377-E1378. <https://doi.org/10.1503/cmaj.170498> PMID:29133538 PMID:PMC5687925
3. Alonso JM, Clifton J, Díaz-Fuentes D. The impact of New Public Management on efficiency: an analysis of Madrid's hospitals. *Health Policy.* 2015; 119(3):333-40. <https://doi.org/10.1016/j.healthpol.2014.12.001> PMID:25533550
4. Tabibi S, Heidari S, Nasiri-pour A, Hosseini Shokouh M, Ameryoun A, Mashayekhi F. Assessment of Professional and Non-professional Managers' Performance among Selected Hospitals in Tehran. *Journal of Hospital.* 2014; 13(2):45-53.
5. Handel MJ. Theories of lean management: an empirical evaluation. *Soc Sci Res.* 2014; 44:86-102. <https://doi.org/10.1016/j.ssresearch.2013.10.009> PMID:24468436
6. Lunden A, Teräs M, Kvist T, Häggman-Laitila A. A systematic review of factors influencing knowledge management and the nurse leaders' role. *J Nurs Manag.* 2017; 25(6):407-420. <https://doi.org/10.1111/jonm.12478> PMID:28580645
7. Tetui M, Coe AB, Hurtig AK, Bennett S, Kiwanuka SN, George A, Kiracho EE. A participatory action research approach to strengthening health managers' capacity at district level in Eastern Uganda. *Health Res Policy Syst.* 2017; 15(Suppl 2):110. <https://doi.org/10.1186/s12961-017-0273-x> PMID:29297346 PMID:PMC5751402
8. Belhiti Z, Booth A, Marchal B, Verstraeten R. To what extent do site-based training, mentoring, and operational research improve district health system management and leadership in low- and middle-income countries: a systematic review protocol. *Syst Rev.* 2016; 5:70. <https://doi.org/10.1186/s13643-016-0239-z> PMID:27116915 PMID:PMC4847191
9. Prashanth NS, Marchal B, Devadasan N, Kegels G, Criel B.

- Advancing the application of systems thinking in health: a realist evaluation of a capacity building programme for district managers in Tumkur, India. *Health Res Policy Syst.* 2014; 12:42. <https://doi.org/10.1186/1478-4505-12-42> PMID:25159487 PMCID:PMC4245764
10. Labrague LJ, McEnroe-Petitte DM, Leocadio MC, Van Bogaert P, Cummings GG. Stress and ways of coping among nurse managers: An integrative review. *J Clin Nurs.* 2018; 27(7-8):1346-1359. <https://doi.org/10.1111/jocn.14165> PMID:29148110
11. Rockers PC, Bärnighausen T. Interventions for hiring, retaining and training district health systems managers in low- and middle-income countries. *Cochrane Database Syst Rev.* 2013; (4):CD009035. <https://doi.org/10.1002/14651858.CD009035.pub2> PMID:23633365
12. Ziari A, Abachizade K, Rassouli M, Mohseny M. Assessment of barriers of implementation of clinical governance in educational hospitals of Shahid Beheshti University of Medical sciences: A qualitative study. *Journal of Hospital.* 2015; 13 (4): 93-103.
13. Ahanchian MR, Emami Zeydi A, Armat MR. Conflict management styles among Iranian critical care nursing staff: a cross-sectional study. *Dimens Crit Care Nurs.* 2015; 34(3):140-5. <https://doi.org/10.1097/DCC.000000000000106> PMID:25840129
14. Tetui M, Zulu JM, Hurtig A-K, Ekirapa-Kiracho E, Kiwanuka SN, Coe A-B. Elements for harnessing participatory action research to strengthen health managers' capacity: a critical interpretative synthesis. *Health Res Policy Syst.* 2018; 16(1):33. <https://doi.org/10.1186/s12961-018-0306-0> PMID:29673346 PMCID:PMC5907405
15. Jones A. Organisational commitment in nurses: is it dependent on age or education? *Nurs Manag (Harrow).* *Nurs Manag (Harrow).* 2015; 21(9):29-36. <https://doi.org/10.7748/nm.21.9.29.e1298> PMID:25629349
16. Karimi Moonaghi H, Emami Zeydi A, Mirhaghi A. Patient education among nurses: bringing evidence into clinical applicability in Iran. *Invest Educ Enferm.* 2016; 34(1):137-151. <https://doi.org/10.17533/udea.iee.v34n1a16> PMID:28569983
17. Purfarzad Z, Vanaki Z, Ghamari Zare Z, Farmahini Farahani M, Ghorbani M. Assessment charge nurses' managerial self-efficacy. *Quarterly Journal of Nursing Management.* 2014; 2 (4):8-16.
18. Carney, M. Understanding organizational culture: the key to successful middle manager strategic involvement in health care delivery? *J Nurs Manag.* 2006; 14(1):23-33. <https://doi.org/10.1111/j.1365-2934.2005.00592.x> PMID:16359443
19. Graneheim UH, Lindgren BM, Lundman B. Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Educ Today.* 2017; 56:29-34. <https://doi.org/10.1016/j.nedt.2017.06.002> PMID:28651100
20. Arieli D, Tamir B, Man M. Teaching qualitative research as a means of socialization to nursing. *Nurse Educ Today.* 2015; 35(6):795-9. <https://doi.org/10.1016/j.nedt.2015.02.021> PMID:25799426
21. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today.* 2004; 24(2):105-12. <https://doi.org/10.1016/j.nedt.2003.10.001> PMID:14769454
22. Suhonen R, Stolt M, Virtanen H, Leino-Kilpi H. Organizational ethics: a literature review. *Nurs Ethics.* 2011; 18(3):285-303. <https://doi.org/10.1177/0969733011401123> PMID:21558106
23. Jahrami H, Marnoch G, Gray AM. Leadership competencies in the context of health services. *Health Serv Manage Res.* 2008; 21(2):117-30. <https://doi.org/10.1258/hsmr.2008.007027> PMID:18482935
24. Pettigrew LM, De Maeseneer J, Anderson M-IP, Essuman A, Kidd MR, Haines A. Primary health care and the Sustainable Development Goals. *Lancet.* 2015; 386(10009):2119-21. [https://doi.org/10.1016/S0140-6736\(15\)00949-6](https://doi.org/10.1016/S0140-6736(15)00949-6)
25. Naghneh MHK, Tafreshi MZ, Naderi M, Shakeri N, Bolourchifard F, Goyaghaj NS. The relationship between organizational commitment and nursing care behavior. *Electron Physician.* 2017; 9(7): 4835-4840. <https://doi.org/10.19082/4835> PMID:28894543 PMCID:PMC5587001
26. Muse L, Harris SG, Giles WF, Feild HS. Work-life benefits and positive organizational behavior: is there a connection? *J Organiz Behav.* 2008; 29: 171-92. <https://doi.org/10.1002/job.506>
27. Karami A, Farokhzadian J, Foroughameri G. Nurses' professional competency and organizational commitment: Is it important for human resource management? *PLoS One.* 2017; 12(11): e0187863. <https://doi.org/10.1371/journal.pone.0187863> PMID:29117271 PMCID:PMC5678726
28. Custer N. Test Anxiety and Academic Procrastination Among Prelicensure Nursing Students. *Nurs Educ Perspect.* 2018; 39(3): 162-163. <https://doi.org/10.1097/01.NEP.0000000000000291> PMID:29505500
29. Lentz S, Luther B. Nursing Care Management: Influence on Bundled Payments. *Orthop Nurs.* 2017; 36(1): 28-33. <https://doi.org/10.1097/NOR.0000000000000309> PMID:28107297
30. Coiera E. Communication systems in healthcare. *Clin Biochem Rev.* 2006; 27(2):89-98.
31. Nabilou B, Yusefzadeh H, Rezapour A, Ebadi Fard Azar F, Salem Safi P, Sarabi Asiabar A, et al. The productivity and its barriers in public hospitals: case study of Iran. *Med J Islam Repub Iran.* 2016; 30:316.