

Effective Academic Leadership in Clinical Departments of Medical Universities: A Grounded Theory

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Abstract- Universities of Medical Sciences as the organizations that provide human resources for the health systems need effective leaders who can promote the medical status of the countries. In this regard, the present qualitative grounded theory study is an attempt to design an effective leadership model for departments of clinical education. The study identified causal conditions, background, confounding variables, consequences, and the central theme of “belief in effective leadership” to determine formation process of effective leadership. Based on the study findings, effective leadership model was designed for clinical education departments of medical universities. The distinguishing aspect of this model compared to the previously presented models of academic leadership is creation of the belief of effective leadership in medical sciences universities. This distinguishing factor emphasizes the academic leader’s recognition of their immediate environment, university, department and their selves.

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Introduction

Management and leadership are very critical in universities and higher education institutes. Multi-faceted goals of universities, social accountability mission, and traditional vague values distinguish academic leaders of universities from leaders of other institutes. Higher Education academic leaders compared to other leaders must be more competent and skillful (1).

Different studies indicate that academic leaders lack the required characteristics and skills for leadership (2,3). On the other hand, millennial universities encounter diverse challenges to overcome which effective academic leadership is an absolute need. This belief has raised the issue that whether academic leaders need managerial skills or their academic expertise is sufficient for their

academic leadership role (1).

A current challenge in the medical universities is the process of selection and training effective leaders (4). The role and influence of academic leaders is so robust and important that today many organizations experience managerial inflation, but shortage of leaders; therefore, they search for a manager who as a leader can lead the organization effectively (5).

Furthermore, among these institutions, medical universities, which supply human resources for the healthcare system, particularly necessitate an academic leadership approach. This approach aligns with their increasing responsibility within the healthcare system, contributing to the advancement of the country's medical standards. Within the hierarchical structure of universities, heads of educational departments maintain

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close proximity to faculty members. Furthermore, owing to shared educational backgrounds, interpersonal relationships, and a deep understanding of the technical needs, issues, and challenges faced by department members, department heads exert a significant influence on fostering a cohesive identity within the department. Conversely, faculty members and deans of faculties often harbor diverse professional aspirations. It is the department head who plays the crucial role of integrating these varied goals to work towards common objectives. This multifaceted role underscores the intricacies of management at this level and results in heightened expectations placed upon them to uphold the integrity of the department and enhance its scientific standing (6).

Hence, heads of educational departments, particularly within intricate academic landscapes like the field of medical sciences, must employ effective leadership strategies to steer their sub-systems towards excellence in medical education. Indeed, honing leadership abilities through the management and coordination of these sub-systems will enhance the educational and communicative dynamics within the department (7).

Nevertheless, in recent years, policymakers within the Iranian Ministry of Health and Medical Education have shown interest in fostering the development of leadership skills. However, unlike certain other countries, the undergraduate medical education curriculum in Iran lacks provisions for educating students in management and leadership skills (8). Yet, the lack of familiarity of managers at various levels within universities of medical sciences with management and leadership skills remains a significant challenge highlighted in the literature on Iranian medical education (1,5,7).

Analysis of existing literature reveals that studies in the field of leadership in medical education predominantly adopt a quantitative approach, concentrating on the leadership styles of heads of departments in medical universities.(1,4,5,9,10) Meanwhile, to the best of our knowledge there have been no research findings regarding evolution of the leadership styles within medical education universities of the country, its consequences, and accessing effective leadership (1). Lotfi's findings indicate that despite the significance of leadership skills and their pivotal role in medical education universities, still there is a lack of a theoretical framework to guide managerial conduct in these universities (4). Ahanchian study highlights that although heads of educational departments serve as the crucial link between faculty members and higher education policymakers, they have not received adequate attention or recognition for their role and contributions

(11). Another study on faculty development of educational managers of medical universities, has emphasized on the concept of human resources development and various factors affecting it (12). Javanak Liavali *et al.*, presented a model for professional development of heads of clinical education departments. From the six dimensions of professional development, departments heads have emphasized on leadership skills more than other dimensions (7). Despite this emphasis, to the best of our knowledge there is no other study on development of leadership and a leadership model in medical sciences universities. Jafari *et al.*, Quantitative study in 2013 on educational department heads of universities and higher education institutes has resulted in the formulation of a model aimed at enhancing the effectiveness of these individuals within their respective institutions (13). Irani *et al.*, has designed effective generous leadership model that is focused on public hospitals of the Qom province (14). Saatchi and Azizpour following a comprehensive literature review on leadership theories, presented an effective leadership model for Iranian universities (15). This study did not incorporate the perceptions and attitudes of managers, particularly within medical universities, into its analysis. Bikmoradi's study in 2009 on the requirements of effective academic leaders in medical universities of Iran while considering the differences between medical education system of Iran and other countries has presented challenges and barriers that medical university managers of medical sciences universities face in regard to effective academic leadership; although, he has not defined an effective leadership model for medical universities of Iran (16).

In summary, the Iranian literature concerning effective leadership elements, particularly within clinical educational departments, is sparse despite the significance and responsibilities associated with these managers within medical universities. Furthermore, most studies adopt a quantitative approach to examine leadership styles within Iranian medical universities. However, these studies fail to explore the perceptions and attitudes of deans, university managers, and department heads regarding the current state of leadership, its challenges, and its potential future trajectory in Iran. In other words, to the best of our knowledge there a notable absence of Iranian studies on effective leadership among clinical educational department heads within Iranian medical universities (17).

While there exists a variety of studies in the field of academic leadership in other countries. Despite the limited informal programs for professional development

of university managers, universities lack organizational strategies for development of leadership skills (18). Dopson *et al.*, in 2018 emphasized the limited number of studies on academic leadership (19). According to Shahmandi *et al.*, study (mentioned by Blair, 2000), Although there is a growing demand for university managers to fulfill the role of effective leaders, the literature on the performance, educational requirements, characteristics, and attitudes of academic leaders remains limited (17). Joost *et al.*, investigated challenges of academic leaders in medical universities of South Africa. (20) Azizi in 2008 investigated leadership styles of academic leaders, and their roles, and challenges in Afghanistan (21). White *et al.*, in their study identified characteristics of potential academic leaders of medical universities (22). Barvani *et al.*, in 2016 investigated challenges and facilitators of leadership in medical

universities (23). Mills and Scott in 2018 emphasized the research limitations in regard to effective leadership in nursing departments (24). Casentino in a paper in 2021 emphasized on effective leadership in managing medical universities worldwide (25). According to the effective leadership model presented by Hersey and Blanchard and Vroom and Itan, several effective academic leadership models were designed and presented. The most vital models include: effective management and leadership in higher education, leadership dimensions in higher education, complexity and chaos theory, academic leadership, leadership of educational departments of universities, academic leadership competencies, five dimensional model of leadership and evolutionary leadership in higher education (26). A brief overview of the academic leadership models is presented in Table 1.

Table 1. Academic leadership models

Model	Author	Year
Effective management and leadership in higher education	MacCaffrey	2019
Leadership dimensions in higher education	Bolden	2013
Complexity and chaos theory in higher education	Kezar	2008
Academic leadership	Ramsden	2008
Leadership of educational departments of universities	Bryman	2007
Academic leadership competencies	Spondlove	2007
Five-dimensional model of leadership	Kouzes & Posner	2006
Transformation leadership in higher education	Astin & Astin	2000

Despite the crucial roles played by heads of clinical departments in medical universities, what is lacking in Iran is a model upon which the managerial behavior of department heads could be directed towards effective leadership. In fact, despite the paramount importance of effective leadership, the existing gap lies in the absence of an effective leadership model for heads of clinical departments in medical universities. Such a model should be informed by both domestic and international literature, drawing upon contextual data and qualitative research findings from medical universities. In the Iranian medical education system, both medical and paramedical programs are under the auspices of ministry of health and medical education which operates independently of the ministry of higher education. The issues outlined serve as the foundation of the current study, wherein the researchers aim to analyze the questions through the perspectives of health system and management experts, as well as drawing insights from existing literature.

Materials and Methods

Given the identified research gaps in the field of

academic leadership, this qualitative grounded theory study is an attempt to define the elements of effective academic leadership and its formation process in clinical departments of medical universities in Iran. Furthermore, the study aims to introduce and validate an effective leadership model specifically tailored for clinical department heads.

In this study, 18 semi-structured interviews were conducted with key informants of Iran, Tehran and Shahid Beheshti universities of medical sciences. The findings about effective leadership formation in clinical departments were extracted and analysed according to the Strauss and Corbin methodology in 2015. The findings were 610 primary codes, and 303 concepts that were classified into 13 categories. After defining the causal relationships, contextual conditions, confounding variables, intervening conditions, approaches, consequences, and the central theme (effective leadership belief creation), effective explicit leadership formation process was defined and an effective leadership model for clinical departments was designed. Subcategories, categories of each causal condition, background, intervening factors, strategies, and consequences, are

presented in tables 2-6. After considering credibility of the data, the internal consistency of the proposed model

was assessed by a panel of management and health experts.

Table 2. Themes, categories, subcategories of the causal conditions

Theme	Category	Subcategory
Causal conditions	Leadership skills	Staff persuasion
		Empathy and sympathy
		Crises management
	Leader psychological characteristics	Team building
		Respectful behavior
		Ethical hegemony
		Prevention of conflict of interest
		Verbal influence
		Trust
	Leader innate characteristics	Faculty Development
		Self-esteem
		Innovation and intelligence
		Bravery and seriousness
		Honesty and clarity
		Charisma
	Authority	
	Self-motivation	
	Interest in management	
	Positive thinking	
	Effortfulness	

Table 3. Themes, categories, subcategories of the causal background

Theme	Category	Subcategory
Causal Background	Process and managerial deficiencies	Academic leadership ambiguity
		Lack of managerial instruments
		Lack of faculty development programs for promotion of managers
		Incapable process of department head selection
		Lack of supportive and motivational mechanisms
		Managers being stuck in daily routines
		Traditional management
		Lack of managerial stability
		Professional and position conflicts
		Physician authoritativeness
		Politics over policy
		Managers lacking management knowledge
		Part-time managers
		Lack of managerial staff in clinical departments

Table 4. Themes, categories, and subcategories of the intervening factors

Theme	Category	Subcategory
Intervening factors	Meritocracy	Managerial equity
		Innovation
		Acceptability

Table 5. Themes, categories, subcategories of the strategies

Theme	Category	Subcategory
Strategies	Development of human capital leadership	Staff motivation
		Managers motivation
		Managers burnout prevention
		Professionalism
		Work experience
		Succession
		Leadership belief
		Educating and awareness creation
		Powerful network of communications and interactions
		Modelling

Cont. table 5

	Common sense
	Delegation
Collaborative management	Common support for university promotion and excellence
	Launching consultation structures
	University cultural promotion
Systemic attitude	Acting under the high documents framework
	Holistic view to university
	Managerial structure revisions
	Designing goals and vision for the department
Strategic thinking	Clarifying the vision
	Directing the team to achieve goals
	Program-centeredness
supervision and assessment of department	Department assessment and evaluation
	Assessment of managers

Table 6. Themes, categories, subcategories of the consequences

Theme	Category	Subcategory
Consequences	Social consequences	Social accountability
		Health system promotion
		Students' professional development
		University promotion
		Common efforts to promote department
	Organizational consequences	High quality relationship between department head and staff
		Clinical team excellency
		More efficient Faculty members
		Rapid measures
		Team-work formation
Personal consequences	Attracting new interested staff	
	Faculty and staff development	
	Job satisfaction and sense of peace	
	Encouraging members to pursue more activities	

Results

In this study, effective leadership formation process was investigated in clinical departments of universities of medical sciences. Based on the analysis of interview data gathered from key informants, who were experts in management and healthcare, the study identified the essential elements of effective leadership. Subsequently, an effective leadership model was formulated specifically tailored for clinical departments within medical universities.

The causal factors include leadership skills, innate and psychological characteristics of the leader (Table 2). The background conditions that affect effective leadership approaches include process and managerial limitations, intervening conditions affecting effective leadership, meritocracy and effective leadership approaches, leadership in human resources development, collaborative management, systemic attitude, strategic thinking, supervision, and evaluation of educational departments (Table 3). The outcomes of effective leadership were classified at individual, organizational, and social levels (Table 6).

In the designed model, the paradigmatic elements of

effective leadership formation process in clinical departments of medical universities located in Tehran and their relationship with each other is presented. At the heart of this model lies the establishment of a strong belief in effective leadership, serving as the central axis. This belief system holds the most significant correlation with the overarching concept of effective leadership and its various associated categories.

Discussion

In the paradigmatic model presented, all elements are in a dynamic state, revolving around the core axis of establishing a belief in effective leadership. Establishing a belief in effective leadership is an element that is interconnected with all categories and serves to link the central phenomenon of effective leadership with other related categories. The concept of belief in effective leadership is evident throughout all components of the paradigmatic model that has been presented. Shakour *et al.*, in 2012 study on academic leadership in one of the Iranian universities (1) and Ahanchian study indicates that directors of medical universities, who predominantly come from medical backgrounds, often lack participation

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in management and leadership programs (11). Moreover, they typically do not perceive a necessity for such programs. From the researchers' point of view this phenomenon could be attributed to cultural and background factors, as well as potential disbelief in the efficacy of leadership training among this group of managers. Hence, it appears that unless these managers recognize this crucial need, they are unlikely to initiate any changes in their leadership styles.

The academic leadership models presented in Table 1 do not explicitly emphasize the belief in effective leadership, which distinguishes this study from previous ones. From the researcher's perspective, the insufficient recognition of academic managers may be the underlying reason for their disbelief in effective leadership within Iranian Medical Universities. On the contrary, in the effective leadership model outlined in this study, the central axis (belief in academic leadership) is aligned with aspects discussed in the MacCaffrey study, which underscores four critical domains: setting, university, department, and self (26).

In analysis of the causal conditions of effective leadership that is focused on the preliminary factors focused on effective leadership, the background belief of some of the participants about innate and psychological characteristics of leaders is to the extent that without considering them to educate the authorities regarding management and leadership is not possible. On the other hand, most of the study participants believe that leadership is an innate characteristic, and an educational leadership skills development plan will be presented to those who have this innate characteristic. However, in some models of academic leadership, Bolden in 2013, and MacCaffrey in 2019 mentioned innate characteristics that are consistent with the findings of this study. Although Austin and Austin in 2000 academic leadership model emphasizes on emerging leadership characteristics in all the stakeholders (26). The researchers posit that this difference in approach to the inherent characteristics of leaders stems from the distinct approach of the Iranian medical education system towards management and leadership education. They emphasize the need for greater attention from medical education policymakers in addressing this aspect.

Furthermore, it is crucial for management and leadership education to commence within the medical undergraduate curriculum and be sustained through faculty development programs. The study participants identified learned and teachable skills, which, in comparison to the academic leadership literature, are scarce and limited (6,16,23,27-30). This could serve as

further evidence suggesting that study participants prioritize innate leadership qualities over the importance of education in leadership development. This finding does not align with the effective academic leadership elements outlined in Table 1, which could be attributed to a lack of recognition among academic managers within the university and their role in advancing the institution.

The self-recognition of heads of clinical departments emerged as another issue inherent in the interviews with certain study participants. Some study participants do not regard certain department heads as leaders and express doubt regarding their ability to effectively steer their departments. Even department heads who are deemed successful by their department staff do not recognize themselves as successful leaders. Furthermore, some department heads perceive leadership as unattainable or beyond their reach. Most of them in response to the interview question of "what are your experiences of working with effective leaders?" responded that they had no experience of working with effective leaders or even good department directors, and they had not thought of this important issue before the interview session. It seems that faculty members and even academic leaders do not believe in the leadership role and its importance; therefore, they do not care about analyzing the managers' characteristics in the leadership domain. The findings of this study do not coincide with other academic leadership models (Table 1).

As mentioned earlier, background conditions have a significant impact on the process of leadership formation, and this influence is evident across all aspects of the paradigmatic model. However, the direct impact of process and managerial deficiencies on the approaches is direct and tangible. According to the views of the participants, some of the department heads do not believe in the concept of leadership and its significance. Consequently, they do not actively seek to enhance their leadership skills as a strategy. Instead, when faced with managerial challenges within the department, they primarily seek managerial solutions and rely on managerial skills. They do not believe that academic leadership and it is the main key to resolving the managerial problems. The belief in leadership among high-level managers influences this approach. From the researchers' point of view a department head who is tasked to department managerial and routine tasks, without the expectation to engaging in broader leadership responsibilities, may struggle to effectively lead their department staff. Managers typically fulfill the expectations placed upon them. The lingering skepticism regarding the status of leadership within clinical

educational departments, as well as doubts about the role of department heads as leaders, cast a shadow over other areas of managerial and process deficiencies. The ambiguity surrounding academic leadership in medical universities specially in clinical departments, lack of a defined program to support and promote department heads, deficient process of selection of departments heads and lack of attention to the significance of leadership characteristics in selecting a leader, and being stuck in routine managerial tasks, traditional management and dictatorship, frequent changing of positions and managerial instability, conflict between expertise and managerial position, physicians' power relations that hold authority over the health and education system, politics power against policies, and managers who lack managerial knowledge are all under the influence of managers at diverse managerial levels who do not believe in the necessity and significance of academic leadership in clinical departments.

The background conditions identified in this study have not been addressed in other academic leadership models. However, in some studies problems and challenges of academic leadership are presented. Lack of familiarity of different level managers of medical universities with management and leadership skills is mentioned in other studies (1,5,7) Analysis of intervening conditions that affect effective leadership approaches in clinical departments indicate that established meritocracy is a facilitating element if the managers believe in leadership. While Kezar's academic leadership model acknowledge the influence of elite individuals, this aspect is not emphasized in other models (26). The researchers believe that in an environment where there is a lack of belief in leadership, department heads are typically selected based on tradition, with little expectation for them to do anything beyond managing the day-to-day operations of their departments.

The recurrent absence of expectations gradually diminishes the significance of roles, fostering the belief that department heads are merely stuck in routine managerial tasks. This cyclic

Effective leadership approaches cannot succeed without a foundational belief in leadership and its impact. Development of Human resources capital, cooperating management, systemic attitude, strategic thinking, supervision, and evaluation of educational departments require directing managers from a focus solely on management tasks to embracing leadership responsibilities. Authorities and managers who lack belief in academic leadership and fail to direct their teams cannot effectively utilize the aforementioned approaches

to strengthen and support effective leadership. However, some studies have mentioned academic leadership approaches and their findings align the results of this study (31).

Implementing these approaches directs the consequences of effective leadership at social, organizational, and individual levels. These consequences not only require efforts of different level managers of medical universities and faculty members, but also demand a shift in their attitudes toward effective leadership and a belief in its importance within medical universities. While the literature on effective leadership consequences remains limited (7,32). According to the findings of this study extracted from perceptions and attitude of the Iranian key informants within medical universities and the recognition of effective academic leadership elements in clinical departments, it appears that leadership has not received adequate attention from the ministry of health policymakers. The specific distinguished status of medical universities among other organizations and universities requires more attention towards implementing academic leadership in these universities. Professional and public stakeholders are recipients of services rendered by medical universities. The variation of stakeholders increases the pivotal role of academic leaders of medical universities over other leaders. The status of academic leaders within clinical education departments is often overlooked compared to other academic managers within medical universities. According to this study, managers and clinical departments are surrounded by a wide range of processes.

and managerial deficiencies. Generating the belief of effective leadership at different managerial levels, including academic staff members and managers of medical sciences universities is challenging.

The defining feature of this study is the emphasis on the belief in effective leadership, which permeates all clinical departments. Establishing this belief necessitates strategic planning by medical education policymakers at the macro-level. It is evident that transitioning clinical department managers from mere managerial behaviors to effective leadership necessitates more than just instruction. It requires the cultivation of a strong belief in effective leadership among various managerial levels and faculty members within medical universities. This is a complex and ongoing endeavor that demands sustained efforts over time.

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