Elements of Management and Leadership Strengthening in Health Systems: A Qualitative Study From Iran

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Research

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Abstract

Background: Achieving the health-related Millennium Development Goals (MDGs) and improved health services needs management and leadership capacity building. Hence, the aim of this study is to identify the elements of management and leadership capacity.

Methods: Semi-structured individual interviews were conducted with 20 health managers. Sampling method was purposive. Data were collected using a researcher-made interview guide. The transcribed text was analyzed using framework analysis.

Results: Five main themes emerged from the analysis: (1) competencies required for managers; (2) selection and appointment of managers; (3) establishment of managers' database; (4) deployment of functional support system; and (5) environmental sensitivity. Each of these themes contains sub-themes.

Conclusions: Extracting elements of management and leadership capacity helps managers to assess management capacity and leadership comprehensively and effectively. Also, effective and useful operations can be done to strengthen the management and leadership capacity.

Introduction

The World Health Organization (WHO) has illustrated that strengthening health systems, particularly health care delivery systems, is an international priority [1]. Besides, there is increasing evidence that strong leadership and effective management can improve health system outcomes [2]. In this regard, management and leadership with their specific skills are the two crucial components in achieving organizational success [3].

It is an undeniable fact that managers are those who ensure the achievement of organizational goals. Therefore, since they are in charge of organization, they need to acquire the knowledge, skills and expertise. Hence, it can be claimed that leadership is one of the most important roles and duties that a manager should have to motivate and guide employees. Also, leadership has an important role in the development of communication channels and fulfillment of the vision and goals [3].

Leadership and management capacity is a necessary and important factor to scale up health services and achieve the MDGs [4, 5]. United Nations Development Programme (UNDP) defines capacity as “the ability of individuals, institutions and societies to perform functions, solve problems, and set and achieve objectives in a sustainable manner. [3]”. In other words, the necessity of capacity building interventions in healthcare is because of quality improvement and sustainable results [6]. Weaknesses in management capacity in all levels of health system have been identified as a constraint to its performance [7].

In order to strengthen management capacity and leadership in health, WHO proposes a core technical framework. Though the framework is developed for Low Income Countries (LICs), it may also be relevant to other countries [8]. According to this framework, the number of managers has to be sufficient and they
should be equipped with the appropriate competencies and critical management support systems which function well. Creating an enabling working environment is the other dimension of this framework [3, 7].

The main focus of management and leadership capacity is on managers of organizations; on the other hand, managers are one of the effective agents and stakeholders of the organization. Therefore, their views on the elements of management and leadership capacity are important. Given the importance of this issue, this study, for the first time identifies the elements of management and leadership capacity of the perspective of managers.

**Methods**

**Study design and Participants**

In this study, a qualitative research design is used to explore capacity building elements of health system management and leadership. Purposive sampling was used for the selection of the participants. A total of 20 managers participated in the study; 18 of whom were male and 2 were female. Inclusion criteria were (1) having at least one article in the field of health system management capacity; (2) working in the field of training health system managers; (3) specialists and faculty members of health system management with related executive or research background; and (4) managers with at least 5 years (at an excellent level) managerial work experience.

**Data Collection**

Data was collected between December 2020 and March 2021. In-depth and semi-structured interviews were used for data collection. Due to the COVID-19 pandemic conditions, the interviews were conducted virtually via Skype. With the permission of the participants, all the interviews were audio-recorded. The interviews lasted between 40 and 90 min. The interview guide was formulated based on a literature review. All the research team participated in developing the interview guide. The interview guide included open-ended questions. The content validity of guide questions was confirmed by five specialist professors. The interview questions included the following: (1) “Which of the health managers in the health system of the countries are among senior managers?” (2) “What is the meaning of health management capacity building?” (3) “How can it be guaranteed that the health system has enough managers?” (4) “What competencies do health system managers need?” (5) “What infrastructure and management support systems does a manager need to succeed in his/her performance?” (6) “What items should an incentive and empowering work environment for the success of health system managers include?” The principal researcher performed all the interviews. Each interview was recorded and transcribed verbatim.

**Data Analysis**

Each transcribed text was reviewed by the researcher. The transcribed text was analysed using framework analysis which included a five-step process: (1) familiarization; (2) identifying a thematic framework; (3) indexing; (4) charting; and (5) mapping and interpretation. Framework analysis allows the user to either
collect all the data and then analyse it or do data analysis during the collection process [9]. After each interview, coding and analysis was assisted using the qualitative data MAXQDA10 software. Initial codes were extracted after listening several times. In the next stage, the coded data were organized based on their similarities to subcategories, and the main themes and sub-themes were extracted. Two researchers (R.B. and A.J.) independently coded transcripts for themes. In case of disagreement, the research team discussed to reach a final consensus.

Results

Themes that emerged from the analysis were organized into: (1) Competencies required for managers; (2) Selection and appointment of managers; (3) Establishment of managers' database; (4) Deployment of functional support system; and (5) Environmental sensitivity. The coded data were organized, and the main themes and sub-themes of the study were extracted (Table 1).
### Table 1
Main themes and sub-themes of this study

| Main themes                                      | Sub-themes                                                                 |
|--------------------------------------------------|-----------------------------------------------------------------------------|
| Competencies required for managers               | Manager's specialized knowledge and skills                                  |
|                                                  | General knowledge and skills of the manager                                |
|                                                  | Gaining comprehensive awareness and cognition                             |
|                                                  | Manager's attitude and perspective                                         |
|                                                  | Gaining educational and work experience                                   |
|                                                  | Establishment of centers for creating and developing managers' competencies|
| Selection and appointment of managers            | Determining the basis for the selection and appointment of managers        |
|                                                  | Establishing a systematic selection and appointment mechanism              |
| Establishment of managers' database              | Determining and defining the requirements and characteristics of the ideal senior manager |
|                                                  | Employment status of managers in managerial positions                      |
|                                                  | Professionalism in management                                             |
| Deployment of functional support system          | Establishment of control, monitoring and assessment system of performance  |
|                                                  | Developing a strategic and operational plan                                |
|                                                  | Establishment of participatory and consulting management                   |
|                                                  | Providing the necessary infrastructure to play the role of manager         |
| Environmental sensitivity                        | Accountability and accountability of managers                              |
|                                                  | Strengthening organizational culture                                       |
|                                                  | Environmental management                                                  |

## Competencies required for managers

This theme includes the knowledge, skills, attitudes, and experience of managers.

### Manager's specialized knowledge and skills and General knowledge and skills of the manager

All the participants mentioned the need for a set of specialized and general skills for managers. General skills refer to a set of capabilities related to the field of management and specialized skills to the field of
health management. One participant commented, “I categorize the competencies that managers need into two: one is general competencies that are the same among all senior managers, such as planning and leadership skills. Second, there are specialized competencies related to health management, for example related field of study.” (P1)

“Many issues, such as responsibility, accountability, planning, and motivation, are common. From this point on, the issues go back to the field of health so that one knows the importance of health. Such as familiarity with a variety of disease science and disease control, familiarity with the equipment and facilities of the health system.” (P2)

Gaining comprehensive awareness and cognition

“The manager must have sufficient knowledge of the environment in which she/he works.” (P6)

“Managers do not have enough knowledge and awareness about their area of authority, so they may make decisions that will harm the organization.” (P10)

Manager's attitude and perspective

The majority of participants believed that managers’ attitudes towards health are important for their role. “One of the most important indicators in evaluating managers is to measure their managerial attitude.” (P7) One of the participants stated: “The manager's attitude towards management is one of the aspects of capacity building.” (P11)

Gaining educational and work experience

Almost all of the interviewees stated that the manager's work and managerial experience is very important in the selection and appointment process. “Examining the work experience of managers and the degree of their success in achieving their goals is one of the effective items in the process of selecting and appointing managers.” (P3) “In improving manager’s competencies, it is necessary to review the educational and development experiences of managers. (P9)

Selection and appointment of managers

One of the issues raised by all the participants in terms of capacity building was the weakness in the selection and appointment process.

Determining the basis for the selection and appointment of managers

In this regard, one of the experts stated: “The selection of managers is not based on evidence; it is not based on knowledge and experience.” (P5)

“We have to have some indicators that if we put this manager as the center manager, it should have at least these.” (P16)
Establishing a systematic selection and appointment mechanism

“Mechanisms for appointments and elections must be in place so that those appointed to senior management of the health system go through a truly transparent and pre-determined job assignment.” (P10)

“We do not have a specific platform in selecting managers, which is effective in ensuring a sufficient number of managers.” (P6)

Establishment of managers’ database

Most of the participants stated that a database is necessary to identify competent managers and to obtain information about the quantitative and qualitative status of managers.

Determining and defining the requirements and characteristics of the ideal senior manager

Interviewees repeatedly stated that in order to provide competent and adequate managers, their requirements and characteristics must first be determined and defined. For example, “one of the experts stated: “In order to define senior managers, it is necessary to clearly define and determine their position and scope of decision-making.” (P8)

One of the characteristics mentioned by almost all the participants was having the role of stewardship and policy maker as well as the systematic and strategic perspective of managers. “Senior managers are the people who have the role of the organization’s macro policy makers.” (P19) “A senior manager is someone who makes the right decision based on environmental changes, in other words, has strategic thinking.” (P4)

Employment status of managers in managerial positions

This sub-theme addresses issues such as estimating the number of managers needed, determining the basis for the distribution of managers, and the multiplicity of managers. “We have to estimate how many managers are needed and then distribute them correctly.” (P9) “Full employment means that this is his/her job, all my time will be spent on this job, so that is my concern.” (P16)

Professionalism in management

“I think one of the principles that has been ignored and neglected in our country is the issue of succession. ... In the discussion of succession planning, issues related to capacity building can be done in a proper way.” (P12) “Although access to management graduates is necessary, we have more difficulty in utilization of management graduates.” (P7) “Outside political debates, we consider a professional position for management so that not everyone can become a manager.” (P18)
Deployment of functional support system

In addition to establish capabilities of managers, what is very important in management building capacity is access to performance support system. This can include a variety of topics.

Establishment of control, monitoring and assessment system of performance

All the participants mentioned the establishment of assessment centers. "In order to strengthen the competencies of managers, the biggest issue that can be addressed is to create a center for the assessment of competencies of managers in all operational, middle and senior levels." (P4) "Determining the assessment standards, clarifying scoring method, the measurement method, selecting the appropriate assessor, and determining the assessment time are some of the items that should be considered in assessing the competency of managers." (P19) “There are no specialized checklists for different areas to be used as a tool for selecting managers.” (P12)

Developing a strategic and operational plan

This sub-theme points to the need for managers to plan and target. "Another issue is the real need for strategic and operational planning. Unfortunately, many universities either do not have these programs or if they do, they are very clichéd and imitative." (P1) “Many organizations do not know why they were created, what their mission is; indeed, they do not have a clear plan and accountability.” (P15)

“We have something called organizational values, such as maintaining the dignity of the people, maintaining the dignity of the organization, a sense of accountability, what actually happens is out of them.” (P16)

Establishment of participatory and consulting management

“In the management systems of health system, if we cannot benefit from good consultants, the most effective and accessible technique is the consultation and participation sessions that benefit from the criticism and opinions of people in the organization.” (P7)

“One of the interviewees stated that the most important support that a manager can have is the existence of specialized and expert staff units.” (P15)

Providing the necessary infrastructure to play the role of manager

The infrastructures discussed in this study include having legal support, establishing an information management system, establishing a flexible and supportive organizational structure, providing and allocating the required resources and facilities, establishing an incentive and punishment system, and having a capable and motivated subset.
“The manager cannot do anything when he does not have the resources and facilities. We expect these conditions to be met as well.” (P14)

“In order for the manager to make a better decision, I suggested that there should be systems that collect, categorize, and process evidence.” (P19) “A senior manager must be able to obtain detailed and accurate information and the basis of his decision is this information and data. If we do not have this information systematically, the manager does not have the tools to make decisions.” (P3)

“The most important motivating factor is that our managers are considered. They want their services, their work and their positive points and honors to be considered in the first place, which is not the case. Another point is that when we expect a manager not to go astray, he must be financially secure.” (P5)

“The next issue that I think is very important is what team the manager is working with. If he has a good team, the organization can be successful, so the building team must be done and the managers can benefit from the right manpower.” (P8)

“There must be specific protocols to support the manager in the health system.” (P11)

“Discussing the structure and agility of the organization is very important, which means that as long as you have to go through several management levels to request a meeting from your superiors, it will cause the manager to be in trouble.” (P1)

**Environmental sensitivity**

This theme contains 3 sub-themes: Accountability and accountability of managers, Strengthening organizational culture, and Environmental management.

**Accountability and accountability of managers**

“Part of the responsibility and accountability depends on how much authority is delegated to me from the top level, how much authority I have in performing managerial duties.” (P20) “A very important problem that now exists in the system is that the necessary authority is not delegated in proportion to the responsibilities assigned to managers.” (P13)

**Strengthening organizational culture**

“The organizational culture that currently dominates our organizations is not suitable for the position of the health care system, it must be changed.” (P17) “Does the organizational culture that exists and is dominant in the university or any other organization make us move towards a learning and innovative organization?” (P18)

**Discussion**
In this study, main dimensions of health management and leadership capacity were identified in five categories: competencies required for managers; selection and appointment of managers; establishment of managers’ database; deployment of functional support system; and environmental sensitivity.

The first dimension that all the experts mentioned in relation to management and leadership capacity building was the competencies required for managers. In their view, the first requirement for capacity building depends on the individual and personal capabilities of the manager. The findings also show that these competencies include a wide range of knowledge, skills, attitudes and behaviors. For example, specialized knowledge in the field of health, power of change, team leadership, evidence-based decision making, communication and information exchange were among the skills frequently mentioned by the interviewees. The identification of core managerial competencies is a fundamental step towards sustainable hospital service provision. These core competencies included evidence-informed decision-making; operations, administration and resource management; knowledge of healthcare environment and the organization; interpersonal, communication qualities and relationship management; leading people and organization; enabling and managing change and professionalism [10, 11].

Capacity building refers to the need for consistent improvement of individuals’ potential and organizational development to achieve organizational objectives effectively [12, 13]. This is also evident in the themes extracted from our study.

Human resources, external, infrastructure and financial have been introduced four dimensions of management capacity in the context of an organization [14–16]. Also, Eisinger (2002) has introduced resources, effective leadership, skilled and sufficient staff, institutionalization and external linkages as elements of capacity [3]. All of these dimensions are consistent with our findings.

Research capacity building in health services has been recognized to be important for decision making in policy and practice. A framework is required for the establishment of planning change and measuring progress building research capacity. The proposed framework includes six principles of capacity building: 1) skills and confidence building, 2) close to practice, 3) linkages and collaborations, 4) appropriate dissemination, 5) continuity and sustainability, and 6) infrastructures [17]. In this study, based on the opinion of interviewees, providing the necessary infrastructure to play the role of manager, manager’s specialized knowledge and skills and general knowledge and skills of the manager are among the dimensions of capacity building.

Leadership is a critical component of a health system particularly in Sub-Saharan Africa where clinicians take on management responsibilities. However, there have been weaknesses in strengthening leadership capabilities. The leadership development programs (LDPs) described was diverse. No consistency was found in the conceptual approaches they adopted. Our findings showed need for further research on strengthening the conceptual and competency frameworks for leadership [18, 19]. One of the most important competencies required for managers was leadership skills and influencing members. This shows that acquiring leadership skills plays an important role in building the management and leadership capacity of the health system.
Capacity building has been applied as a strategy for achieving a healthy society at levels ranging between the individual and entire organization. Four capacity building approaches have been identified are: top-down organizational; bottom-up organizational; partnerships, and community organizing [20]. In other words, the first two approaches point to the importance of organizational structure that is consistent with our findings.

The strengthening health system through improved leadership and management skills of health team can contribute to an increase in health-service delivery outcomes. Results of the study in six provinces in the Republic of Kenya showed significant increase in health-service coverage at the district level (p = < 0.05) in the intervention group compared to the comparison teams. Similarly, there were significant increase in the number of client visits at the facility level (p < 0.05). The leadership development program (LDP) intervention was used in this study [21]. The findings of the present study have also identified the establishment of centers for the creation and development of managers' competencies in this regard.

The effectiveness of health system depends on management. Therefore, there should be facilitated and ensured availability of effective managers in system. In Iran, like other developing countries, clinicians without formal management training are in charge of health management of districts. Almost all of district health managers have not been trained in basic management. District health managers and experts of a health center announced the necessity of management and leadership competencies courses [22]. Sub-theme of establishment of centers for creating and developing managers' competencies also refers to this fact.

**Strengths And Limitations**

To our knowledge, this is one of the first studies that have identified the main elements of management and leadership capacity from the perspective of health managers in Iran.

Due to the Covid 19 pandemic, the interviews were conducted virtually. This may have had an impact on obtaining wealthy data because in a face-to-face interview, it is possible to question and answer, get additional explanations and understand the interviewee's mentality. Also, in this situation, access to some experts and specialists was not possible.

Another limitation in this study was the lack of familiarity and mastery of the interviewees with some managerial terms. This may be because of the fact that most managers had a medical background. Of course, this limitation was removed by further explaining the terms during the interview.

**Conclusions**

Strong leadership and effective management are critical skills needed to strengthen health systems. Capacity plays an important role in improving equitable health service delivery. Health systems are negatively impacted by capacity mismanagement. Building management capacity as a key factor of health systems’ strengthening leads to the improvement of health outcomes.
Health management’ capacity building components are not described by all researchers in the same manner. Since health system managers, especially senior managers, have a significant role in the success of the organization and achieving organizational goals, in this study we present the outcomes of interviews held with the experts including managers, consultants, and academicians on health care capacity management components. Identification of these components is required to assess health care capacity management performance because in order to strengthen the capacity of management and leadership, before assessing its dimensions, the main elements must be identified.

**Abbreviations**

MDGs: Millennium Development Goals; WHO: World Health Organization; UNDP: United Nations Development Programme; LICs: Low Income Countries; LDPs: leadership development programs

**Declarations**

**Competing interests**

No potential conflict of interest was reported by the author(s).

**Ethics approval and consent to participate**

The ethical approval was granted by the Vice Chancellor for Research at the Tabriz University of Medical Sciences (IR.TBZMED.REC.1399.636). The structure, aim and procedures of the study were explained to the participants and their oral consents were received. Participation in the study was voluntary. Additionally, the participants were also assured that the data gathered from the interviews would be used only for scientific purposes.

**Consent for publication**

Not applicable.

**Availability of data and materials**

Data are available from the author upon reasonable request.

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**Authors’ contributions**
RB and AJ contributed to the design, data collection and analysis. RB wrote the manuscript and AJ contributed in review and editing of the manuscript. MG contributed to the design and writing. All authors read and approved the final manuscript.

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