Original Article

Analysis of leadership and team management skills of middle-level healthcare managers of Valsad district, Gujarat

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Abstract

Background: The healthcare managers need to develop the managerial skills and use it for better healthcare delivery. A manager requires leadership skill to empower employees and motivate them to work in an efficient manner to achieve organizational goal. Motivating employees/subordinates and developing positive attitude toward them is one of the crucial skills that the leader needs to develop. The way health team works as a unit affects the outcome and needs good leader. With this background, the current study tends to explore the managerial skills of middle-level managers. **Objectives:** 1. To assess the leadership and team management skills of middle-level managers and 2. To find out motivational factors used by managers. **Materials and Methods:** A cross-sectional study was conducted among district-level healthcare managers and medical officers. Data collection was performed via semistructured and scale-based questionnaire and analyzed using Microsoft office excel. **Results:** 60% of managers had participative leadership style. Team work skills were fair enough among the managers. 53% of medical officers were freshly appointed with experience of less than one year. The middle-level managers used appreciation of work (41.8%) as major motivator of the team. **Conclusions:** The middle-level healthcare managers have good leadership quality as well as teamwork skills. Appreciation of work is commonly used motivator.

Keywords: Human skills, leadership style, middle-level managers, teamwork

Introduction

Lack of management capacity is the key stumbling block to attain the goal of health for all. Healthcare managers are responsible for operationalizing the visions and objectives of policy makers for nation's health and well-being. Healthcare managers need to combine leadership and administrative skills to meet the expectations of patients, health professionals, politicians and the community. Without good management, we will be unable to improve efficiency, effectiveness, and responsiveness in the delivery of health services.[1]

In a recent era, complex and dynamic healthcare environment medical professionals need to be trained to provide high-quality clinical care. Addressing organizational problems is equally important. Good leadership skill in healthcare organizations is linked to superior patient care outcomes.[2] The newer medical curriculum for Indian Medical Graduate (IMG) is competency-based medical education (CBME), which

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includes AETCOM module to incorporate attitude, ethics, and communication skills in IMG. This reflects importance of human skills in future healthcare managers.[3]

Managerial skills are the core competencies of any level of manager in healthcare delivery system. Efficient functioning of healthcare system needs efficient managers. The managers can be graded as top-level, middle-level, and lower level (first-line) managers and the skills required by these managers also differ. Top-level managers need conceptual skills, middle-level needs mostly human skills, while lower level managers need technical skills. All level managers need all kind of skills but proportion differs as multitasking is essential for any manager in healthcare system.[4]

Apart from medical and administrative skills, the healthcare managers also need to have negotiation skills, communication skills, shared vision, and to communicate ideas and concepts.[5] There is a very little evidence related to roles of mid-level healthcare managers who are crucial for accountability of healthcare services.[6] The present study assesses managerial skills of middle-level healthcare managers. The objectives of the study were as follows:

General: To assess human skills of middle-level managers in healthcare delivery system.

Specific: To assess the leadership skills of middle-level healthcare managers.

- To assess the team management skills of middle-level healthcare managers.
- To find out motivational factors used by them.

Materials and Methods

To accomplish the mentioned objectives, a cross-sectional study was planned in Valsad district of Gujarat from December 2019 to September 2020. Valsad district has total 68 primary health centers (PHC). Every PHC is headed by medical officer who acts as a healthcare manager of the center. These medical officers are guided and monitored by the district-level health officials. We considered PHC medical officers and district-level health officers as study population.

Sample size and sampling procedure

Stratified random sampling was used to select the medical officers as study participants. The stratification was at block level: Valsad district has six blocks, namely, Dharampur, Kaparada, Pardi, Umargaoun, Valsad, and Vapi. From each block, seven medical officers were contacted randomly for the assessment of their managerial skills. Because of nonresponse (9.5%) from medical officers, 38 medical officers could be included in the study.

At district level, ten healthcare managers were approached to participate in the study. Out of these, five middle-level district managers consented to participate in the study and responded to the Google form. They were Chief District Health Officer, District Leprosy Officer, District TB Officer, District Malaria Officer, and District Quality Officer. So, totally 43 middle-level managers constituted the total sample size for the present study.

Data collection

The data were collected through preformed, pretested, and semistructured questionnaire. The medical officers were informed about the purpose of the study, and their informed written consent was obtained to participate in the study. The study questionnaire was explained to them in detail, and their doubts were cleared to mark their responses in the data collection form. The district-level managers were also provided with the same format, but it was sent through Google form due to COVID-19 pandemic crisis; their responses were collected via online mode.

Study tool

The study tool included different scales on human skills like leadership scale and team work scale. These scales were adopted from the *Practical manual of Post Graduate Diploma in Management (PGDM-Executive) in Health and Family welfare,* New Delhi.[7] These scales are Likert scales recording responses on 0 to 5 grades.

1. Leadership scale –Totally, 18 items are used to analyze leadership skills under subheadings of administrative skills, interpersonal communication, and conceptual skills. The responses were in category of: Not true, Seldom true, Somewhat true, Occasionally true, and Very true.

For analyzing different leadership styles, "Continuum of leadership behavior by Tannenbaum and H Schmidt" has been used [Figure 1].[8] Accordingly the leadership continuum has either boss centered leadership or subordinate centered leadership. Finally, the leadership styles were decided as Autocratic, Consultative, Participative, Democratic, and Laissez faire (liberal) based on responses of above stated questions.

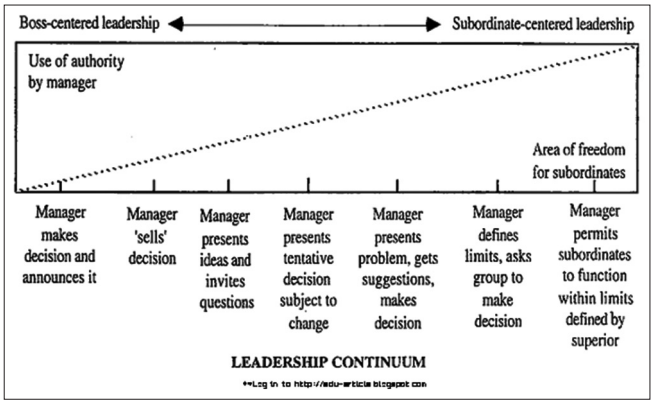

Figure 1: Figure was adopted from "Continuum of leadership behavior by Tannenbaum and H Schmidt".[8]

Scoring

1. Sum the responses on items 1, 4, 7, 10, 13, and 16 (administrative skill score).
2. Sum the responses on items 2, 5, 8, 11, 14, and 17 (interpersonal skill score).
3. Sum the responses on items 3, 6, 9, 12, 15, and 18 (conceptual skill score).

Scoring interpretation

By comparing the differences between these scores, one can determine the leadership strengths and weaknesses. Total score of 30-26 was considered as very high range, score 25-21 as high range, score 20-16 as moderate range, score 15-11 as low range, and score 10-6 as very low range.

2. Team work assessment:

To assess the teamwork of a manager, teamwork assessment tool developed by National Institute of Health and Family Welfare was used.[7] It includes eight questions asking the participants agreement on team work, recognition of work, opportunities in decisions, willingness to work, no corsion, team leader, and team interactions.

Ethical considerations

Ethical approval was taken from Institutional Ethical Committee on 05/03/2020 letter no. MCV/IHEC/10/20. The permission from Chief District Health Officer (CDHO) of Valsad district was taken prior to inception of the study to enroll the district-level health managers and medical officers. Anonymity of the responses was maintained, and all records were kept confidentially.

Data analysis

The data collection forms were checked for completeness on the same day, and data were entered in Microsoft excel sheet. After data cleaning, the data were analyzed using the same software.

Table 1: Demographic profile and work experience of study participants: (*n*=43)

	Medical officers (*n*=38) Frequency (%)	District-level healthcare manager (*n*=5) Frequency (%)
Age (years)		
20-29	27 (71.1)	0 (0)
30-39	9 (23.7)	0 (0)
40-49	0 (0)	3 (60)
>50	2 (5.2)	2 (40)
Sex		
Male	18 (47.4)	5 (100)
Female	20 (52.6)	0 (0)
Experience (years)		
<1	21 (55.3)	0 (0)
1-5	9 (23.7)	0 (0)
5-10	6 (15.8)	0 (0)
10-15	0 (0)	1 (20)
>15 years	2 (5.2)	4 (80)

Frequency, percentage, mean, and standard deviation were used to measure the quantitative variables. Responses in Likert scale were analyzed by calculating the frequency and mean score.

Results

The study participants included medical officers (88.4%) and district-level managers (11.6%). The mean age of medical officers was 29.02 + 7.23 years.

Table 1 says that almost two-third (71.1%) of medical officers were between the age of 20–29 years. Only 5.3% of MOs were beyond the age of 50 years. In district-level managers, all the managers are above the age of 40 years. Male and female distribution was almost equal for MOs, whereas at district level, no female manager found. Almost half (55.3%) of the MOs have less than one year work experience, whereas only 5.2% had experience of more than 15 years.

At district-level managers, 80% of them were having experience of more than 15 years.

This result suggests that very few medical officers continue their carrier at PHC/CHC. We found more than half (55.3%) of the MOs were freshly appointed and having experience of less than one year.

Leadership style of middle-level healthcare managers

The study used a leadership skill scale (explained in materials and methods), which is a Likert scale on 0-5 range.

Figure 2 shows different leadership styles of middle-level healthcare managers. Majority (57.9%; 22) of medical officers had participative style of leadership, while almost one-fourth (26.3%;

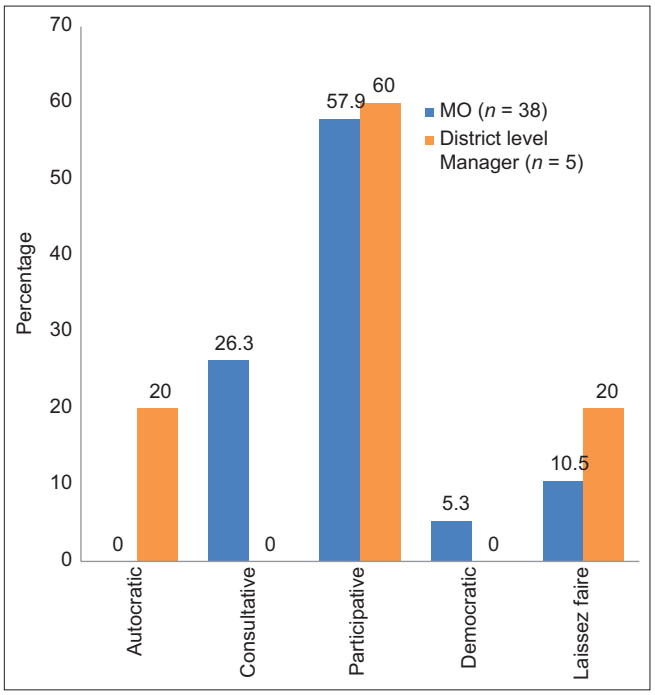

Figure 2: Leadership styles of middle-level healthcare managers (*n* = 43)

10) of them followed consultative style of leadership, followed by laissez faire (10.5%; 4) and democratic (5.3%; 2) styles. Although for district-level managers, 60% of them had participative leadership style and other 40% had two extremes of autocratic (20%) and Laissez faire (20%) leadership style.

Using the scale, the leadership skill was divided into different ranges of administrative, interpersonal, and conceptual skills. In all the three types, majority responses were falling into high range (score 25 to 21) and very high range (score 30 to 26) according to the scale analysis [Table 2].

On analyzing the administrative leadership skills, Table 3 reflects that majority (44.7%; 17) of medical officers are in high range and 39.5% (n = 15) were in moderate range, which have the scope of improvement for better leadership, while 80% (n = 4) of district-level managers are in Very high range (score 30 to 26) category.

On analyzing further the interpersonal leadership skills, almost half (50%; 19) of medical officers are in high range (score 25 to 21) and 23.7%; nine were in moderate range (score 20 to 26), which have the scope of improvement for better leadership, whereas 100% (n = 5) of district-level managers are in very high range category (score 30 to 26).

The conceptual leadership scale analysis shows that most of managers are having high range or above score. All district-level managers (n = 5) are in very high range category (score 30 to 26).

The mean score of administrative leadership is 22.27 (SD 4.18) for interpersonal leadership 23.41 (SD 3.75) and for conceptual leadership mean is 23.65 (SD 3.85).

Motivational factors used by middle-level healthcare managers

To motivate the subordinate staff for better output and quality of work, 41.8% managers said that they appreciate their subordinates' good work [Figure 3]. 20.1% managers used training, and 13.9% managers did supportive supervision as means of motivation to staff. Only 4.6% managers involve the staff in decision making.

Team work skill assessment

Table 3 shows that majority of middle-level managers agreed upon the given statements of teamwork with around 50% of agreements. The agreement reflects that teamwork skills are fare enough among the managers. For few statements like, "The work environment is such that people are willing to give their best," almost one-fourth (25.7, 11) of managers were undecided, and for the statement, "the boss is very open to suggestions about improvement of his/her performance," 18% of managers were not sure and 11.7% were disagree.

Most of the questions are having mean around 4, which is near to agree on the Likert scale. The questions "Team members work well together" and "Our ability to give and receive necessary information is our strength" have maximum mean score of 4.07, whereas question "The boss is very open to suggestions about improvement of his/her performance" has the lowest mean 3.7442. Thus, overall teamwork is good according to mean score.

Discussion

We assessed the leadership and team work skills of 43 middle-level healthcare managers in a tribal district of Gujarat. We found 60% managers had participative leadership style and team work skills were fair enough amongst the managers with around 50%

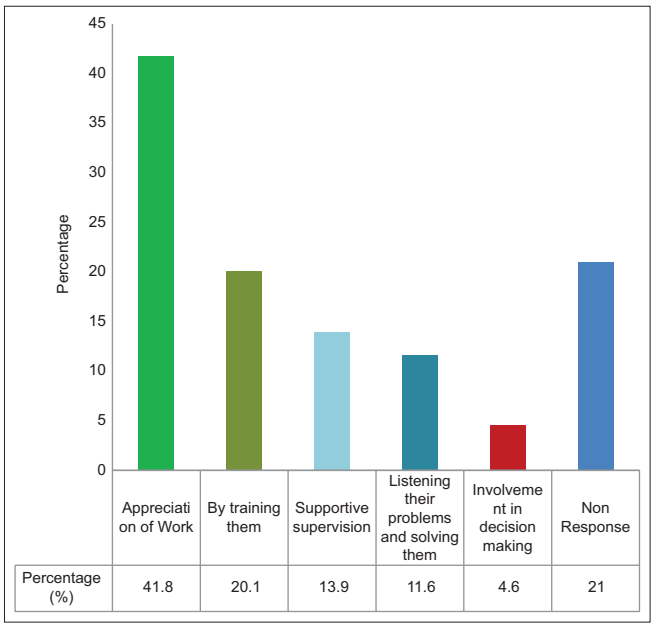

Figure 3: Motivational factors used by middle-level healthcare managers to motivate the subordinate staff (n = 43)

Table 2: Leadership style of middle-level healthcare managers (n=43)

Range (Leadership score)	Administrative leadership		Interpersonal leadership		Conceptual leadership	
	MO (n=38)	District-level manager (n=5)	MO (n=38)	District-level manager (n=5)	MO (n=38)	District-level manager (n=5)
Very High Range (Score 30-26)	5 (13.20)	4 (80)	9 (23.70)	5 (100)	11 (28.90)	5 (100)
High Range (Score 25-21)	17 (44.70)	1 (20)	19 (50)	0 (0)	16 (42.10)	0 (0)
Moderate Range (Score 20-16)	15 (39.50)	0 (0)	9 (23.70)	0 (0)	10 (26.30)	0 (0)
Low range (Score 15-11)	1 (2.60)	0 (0)	1 (2.60)	0 (0)	1 (2.60)	0 (0)
Very low range (Score 10-6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Total	38 (100)	5 (100)	38 (100)	5 (100)	38 (100)	5 (100)

Table 3: Teamwork skills among the middle-level healthcare managers (n=43)

Teamwork sentence	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Team members work well together	14 (32.6)	22 (51.2)	4 (9.3)	2 (4.7)	1 (2.3)
Praise, recognition etc., are given enthusiastically	8 (18.6)	27 (62.8)	6 (14)	2 (4.7)	0 (0)
Everyone has the fullest opportunity to participate in decisions that affect group	13 (30.2)	20 (46.5)	5 (11.6)	3 (7)	2 (4.7)
The work environment is such that people are willing to give their best	7 (16.3)	23 (53.5)	11 (25.6)	0 (0)	2 (4.7)
Team members feel that no one will take disadvantage of them	7 (16.3)	28 (65.1)	6 (14)	1 (2.3)	1 (2.3)
Our team leader is a key to our effectiveness	11 (25.6)	25 (58.1)	3 (7)	2 (4.7)	2 (4.7)
The boss is very open to suggestions about improvement of his/her performance	9 (20.9)	21 (48.8)	8 (18.6)	3 (7)	2 (4.7)
Our ability to give and receive necessary information is our strength	13 (30.2)	22 (51.2)	7 (16.3)	0 (0)	1 (2.3)

agreement on 0 to 5 grade Likert scale. Majority (53%) of the medical officers of PHC/CHC were freshly appointed and having experience of less than one year. This suggests that very few medical officers continue their carrier at PHC/CHC. This affects the development of different human skills for leadership and or team work in them. The work experience of district-level managers may have contributed to their administrative, interpersonal skill, and conceptual leadership skill. Training of medical officers on leadership skills can be planned for better management.

In a study by Pillay R., more than half of the public sector healthcare managers were men and between the ages of 35 and 50 years, and had been in their current positions for less than five years. They concluded that the managers who received trainings either in the form of mentoring, coaching, or in service training were significantly more competent in healthcare delivery, strategic planning, task-related skills, people-related skills, and self-management than their colleagues who received no informal training in healthcare management.[1]

We found that one in every 10 medical officers and two in every 10 district-level healthcare managers were using laissez faire type of leadership. One-fourth of medical officers were following consultative type of leadership. Leadership is said to be situational and subjective. So, it is good that most of managers follow participative type of leadership, which can help leaders to lead the team effectively. Autocratic and laissez faire kind of leaders need to be counseled and trained for better leadership skills.

In study by Teo W *et al.*, study subjects felt that medical education had prepared them well in terms of clinical knowledge, but had not made them competent in administrative and leadership roles. Working in teams is important in healthcare delivery, and study participants emphasized that team skills were particularly important for interactions with their colleagues and subordinates. In addition to cognitive skills, the human skills like interpersonal skills, empathy, appreciating other stakeholder views facilitated the team work.[9]

Kebede S *et al.* showed that training of hospital managers in improving their managerial skills results in a significant improvement in the performance.[10] It is suggested to monitor the relations of the managers with the employees regularly and to plan trainings and workshops for managers about the methods of proper interaction with subordinates in effective listening to them.[10] In a study conducted by Moradi F *et al.,* motivation and interest in becoming a manager was requirement of hospital manager. An unmotivated manager can spread this lack of motivation among other employees as well. Motivated managers also motivate their employees toward realizing the goals of the organization. They will be successful in performing their other duties as well.[11]

In a survey conducted by Quince T, 85% of medical students thought that they should be taught leadership, communication, teamwork, and quality improvement skills in medical curriculum.[12] Chen TY also summarized leadership development methodologies and described how it can be implemented in existing medical curricula.[13] The newer medical curriculum for Indian Medical Graduate (IMG) adopted competency-based medical education (CBME), which includes AETCOM module to incorporate attitude, ethics, and communication skills in IMG.[3]

Three areas of skills are necessary for carrying various functions of management, technical/administrative, human/interpersonal, and conceptual skills of leadership. Administrative skill is to use knowledge, methods, techniques, and equipment necessary for the performance of some specific task acquired from experience, education, and training. Human/interpersonal skills are ability to interact and work effectively with people and build team work. This skill that includes an understanding of motivation and an application of effective leadership is very important for middle-level managers, whereas conceptual skills become increasingly important in higher managerial jobs.[14]

A study conducted by Ghosh R *et al.* showed that effective team work is important to deliver high-quality treatment to patients. All doctors must demonstrate an appreciation of what makes a good team and good team players. Clear understanding of the goals, individual responsibilities within the team, ability to communicate with other team members, and ability to listen to the views of others is important.[15]

Health sector performance is critically dependent on worker motivation, with service quality, efficiency, and equity, all directly mediated by worker's willingness to apply themselves to their task. Resource availability and worker competence are essential but not sufficient to ensure desired worker performance.[14] Motivation influences quality of work and productivity, and health managers need to understand what motivates employees to reach peak performance. Only 4.6% managers in our study involve the staff in decision making. Involvement of staff in decision making will boost up their morale and sense of belongingness toward healthcare system.

Di Vincenzo *et al.* noted that at recruiting phase, many organizations focus only on clinical skills without considering candidates' managerial skills. Most of the organizations do not assess training needs of candidates or they do not have resources to invest in training activities. They supported the development of a strategic approach to human resource management that allows one to identify, train, and select the optimal mix of knowledge and managerial skills to cover a middle-management role.[6]

Limitations

It is important to note that ranking of these competencies by managers was purely subjective and based on a self-assessment. It may have been influenced by the respondent's lack of knowledge with the topic and therefore a lack of confidence in being able to rate the items, or it may have been based on a self-evident knowledge gap. The study with the involvement of more number of district-level healthcare managers could improve the external validity of the study findings.

Conclusion

- Participative leadership style was opted by majority (Around 60%) of middle-level managers.
- The study revealed that for better functioning of health facilities and improvement of management skills of middle-level managers, we need to focus on improvement and development of HUMAN SKILLS.
- Team members are working in co-ordination, but some issues like "work environment, participation in decision making and boss is not open for suggestion" are the concerned areas.
- Appreciation of work and training the team members used to be common motivational factors by middle-level managers.

These findings reflect the reality of the local health service environment and the needs of health managers and will be useful as we aim to enhance current and future management and leadership capacity in the health sector.

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Conflicts of interest

There are no conflicts of interest.

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