

House Officers' Perspective of Leadership in Undergraduate Curriculum: A Qualitative Study

Rashida Sultana¹, Abid Ashar²

¹Associate Professor, Obstetrics & Gynae, Sharif Medical & Dental College, Lahore

²Professor Oral and Maxillofacial surgery, Principal – Dentistry, Fatima Memorial Hospital, College of Medicine and Dentistry, Lahore

Author's Contribution

¹Substantial contribution to the Conception of design or the work, drafting the work of revising it critically for important intellectual content approval of the version to be published

²Drafting the work of revising it critically for important intellectual content approval of the version to be published

Funding Source: None

Conflict of Interest: None

Received: Dec 14, 2020

Accepted: April 29, 2021

Address of Correspondent

Dr. Rashida Sultana

Associate Professor - Obstetrics & Gynae

Sharif Medical & Dental College, Lahore

drashidasultana@gmail.com

ABSTRACT

Objective: To explore the house officers' perspective about leadership skills and their development during undergraduate training.

Methodology: This qualitative study was conducted in September 2019. Two audio-recorded focus groups discussions were conducted with house officers; each comprised of six participants. Purposeful maximum variation sampling was used with equal coverage of gender including low and high scorers based on their academic records. Open-ended questions were asked with short follow-up questions. Verbatim transcription of the entire discussion was done, followed by content analysis. The findings were described using quotes, and illustrations. Member checking and triangulation with the frequency of quotes was used for validation.

Results: Leadership skills identified by the study participants were the same as priori themes given in "NHS-Medical Leadership Competency Framework" namely "demonstrating personal qualities" 47 (38.84%) (Self-management, self-awareness, acting with integrity), working with others 37 (30.58%) (Communication skills, teamwork), improving services 16(13.22%) (Empathy, ensuring patient safety), management skills 12(9.92%) (Time management, resource management, managing critical situations) and setting direction 9 (7.44%) (Setting and achieving targets, decision making). The process of leadership development was explored in three dimensions i.e. contributing factors, potential obstacles, and suggested improvements to enhance leadership skills. The most common theme in all these domains was faculty-related followed by environment-related and student-related factors.

Conclusion: "Faculty-related factors" was the most emerging theme in contributing factors, potential obstacles as well as in suggested improvements for leadership development.

Keywords: Curriculum, house officers, medical education, medical leadership, undergraduates.

Cite this article as: Sultana R, Ashar A, House Officers' Perspective of Leadership in Undergraduate Curriculum: A qualitative study. *Ann Pak Inst Med Sci.* 2021; 17(2):99-.doi.10.48036/apims. v17i2.493

Introduction

Leadership is a multidimensional phenomenon and has been around since antiquity. Silva defines leadership as, "The process of interactive influence that occurs when, in a given context, people accept someone as their leader to achieve common goals".¹ Leadership in medical education engages healthcare professionals in setting the direction, implementing the change, and coping with the change that may be planned, emergent or spontaneous.^{2,3} There is no unified science of leadership however detailed planning,

and top-down directions are helpful in the health care system.³ Leadership in academic organizations tends to be focused on collaborative leadership that involves the team members to complement their traits, and abilities to achieve the shared goals. Effective leadership behaviors include care, conversation, respect, and authenticity in response to a particular context.⁴

The systematic social scientific research on leadership did not begin until the early 1930s. In the early 1970s, interest in leadership traits re-emerged.⁵ It is mandatory to develop

leaders at all levels to overcome the challenges necessary to improve health care services.⁵ Undergraduate medical education provides the ideal setting to build the foundation of leadership skills in future doctors. Many leadership development programs have been designed and implemented in western countries to address the need. The “Medical Leadership Competency Framework” (MLCF) by NHS highlights five domains for effective health care services, i.e. demonstrating personal qualities, working with others, setting directions, managing, and improving services.⁶ The Association of American Medical College (AAMC) delineates the “new role of physician leaders” and emphasizes “organizational leadership”.⁷ “Leader” is one of the major role in the recent “CanMEDS Physician’s Competency Frame Work”.⁸ In Pakistan, there is no formal education on leadership in medical schools. Pakistan Medical and Dental Council adopted the model of seven-star doctors including “community leader” as one of the attributes.⁹ Medical graduates must learn that the traits that make them good clinicians only may not help them to emerge as good leaders and vice versa.²

Most leadership literature is from western medical schools. No study could be found in my literature search in the Pakistani context. So, this qualitative study aims to explore the house officers’ perspective about leadership skills’ identification and development during undergraduate training. It focused to identify the opportunities available for them at undergraduate level to develop leadership skills. It also explored the factors to enhance the acquisition of leadership skill and the potential obstacles in leadership development. In local academic medical context; this study would explore the house officers’ perspective of leadership at institution of Principal author. This study will bridge the literature gap as well as it can be used as a need assessment in the development of “leadership curriculum”. The perspective of house officers is explored because they are freshly graduated and major stakeholders in the health care system. A qualitative study is helpful for in-depth exploration of the perspective of study participants.

Methodology

This qualitative study was conducted in September 2019 at Sharif Medical and Dental College, Lahore, affiliated with Sharif Medical City Hospital that is a tertiary care hospital. Data was collected after ethical approval from Institutional Ethics Committee no. SMDC/SMRC/86-2019. The study design is a constructivist paradigm using qualitative phenomenology theory research. Purposeful

maximum variation sampling was used with equal coverage of gender including low and high scorers based on their final professional examination. Study participants with low scores were included in group one while high scorers were in group two. The academic records were taken from the student section office. The high and low scorers with good communication skills who were doing house jobs in different specialties like medicine, surgery, pediatrics and gynecology were selected. Participants who gave “consent” and “fulfilled inclusion criteria” were included in the study.

“Focus Group Discussion” was used as a data collection tool for this qualitative study. Two focus group’s discussions of six participants each; were conducted. Questions for focus groups were generated after a literature review on medical leadership to ensure that construct aligns with existing literature, and research theory. Study participants were provided with reading material on leadership skills adopted from “Medical Leadership Competency Framework-NHS”.⁶ Participants of focus groups were welcomed and were seated in a “round table” format in a demonstration room in the hospital vicinity. Their privacy and confidentiality were ensured through the allocation of pseudonyms like A, B, C etc. Overview of the research topic and ground rules were informed. Open-ended questions, as given below were posed with short follow up questions for in-depth exploration.

- What leadership skills do you have?
- How did you develop these leadership skills?
- How can your leadership skills acquisition be enhanced during medical education?
- What other resources/support do you need to enhance your leadership skills?
- What are the potential obstacles in leadership development during undergraduate years?
- How do you feel that your education before medical college helped to develop these skills?
- Is there anything else you want to say?

Both focus groups were moderated by the principal investigator. Comfortable group dynamics was maintained in these discussions. The total duration of two focus groups discussions was 2 hours and 45 minutes to ensure in-depth exploration. All conversation was audio-

recorded. Debriefing was done. Notes of focus groups discussions were taken by the moderator.

After collecting the data, verbatim transcription of the entire discussion was done in Microsoft Word, which was validated through member checking using the participants, and by both the authors. Transcription was color coded for each group participant. The validated transcript was imported into Nvivo-12 to generate nodes and “word clouds” of both focus groups discussions. Content analysis was done by coding meaningful chunks of the collected data, categorizing them into codes, creating a relationship between the codes to generate themes, and inter-linking the themes manually by making folders and subfolders. For perceived leadership skills “Priori Themes” as described in “Medical Leadership Competency Framework-NHS” were used to maintain literature alignment.⁶ However for the “process of leadership development” themes and sub-themes were derived from the collected data. The findings were described using themes with quotes along with their number, percent and illustrations. Themes and sub-themes were revalidated by revisiting the study questions, transcription, and frequency of quotes by both authors.

Results

The perspective of leadership skills of study participants was explored in-depth and categorized into five themes adopted from “National Health Services (NHS)- Medical Leadership Competency Framework” i.e. demonstrating personal qualities, working with others, management skills, improving services, and setting direction. Comments verbatim of perceived leadership skills identified as “Priori Themes” and frequency of quotes associated with different themes is shown in table I.

Comparison of perceived leadership qualities among male versus female house officers in terms of several quotes is as follows: “demonstrating personal qualities” 24 versus 23, “working with others” 18 vs. 19, “improving services” 5 vs 11, “management skills” 7 vs. 5 and “setting direction” 3 vs. 6.

The process of “development of leadership” was explored in three dimensions i.e. contributing factors, potential obstacles, and suggested improvements to enhance leadership skills in house officers.

Both the focus groups discussions with the house officers revealed factors that contributed most in leadership development during their undergraduate medical

education were faculty-related followed by environment-related, and student-related factors. Pre-medical school experience also has an impact on the development of leadership skills as detailed in Table II. In faculty-related contribution; the most emerging sub-themes were extracurricular activities, curricular activities, and teachers as shown in table II.

Discussion on potential obstacles in leadership development led to three major themes i.e. faculty-related, environment-related, and student-related obstacles as shown in table III. Interestingly the study participants who were high scorers highlighted faculty-related and student-related obstacles while low scorers stressed more on environment-related obstacles as is shown in table III.

Suggested improvements to enhance leadership skills acquisition instigated four major themes i.e. faculty-related improvements being most emphasized followed by environment-related, student-related, and family-related factors. In a comparison of two groups frequency of quotes was almost the same regarding faculty-related and environment-related factors however high scores stressed more on student-related improvements as compare to low scorers i.e. 5(7.94%) versus 2 (3.07%) as shown in Table IV. However low scorers also highlighted the importance of family support to improve leadership skills.

Word cloud of two focus groups discussions is shown in figure 1. It highlighted students, college, teachers, medical, leadership, skills, support, team, work, time, management, communication, administration, extracurricular, activities etc.

Discussion

Leadership development is crucial to maximizing productivity and quality assurance in the health care system. Research on educational leadership emphasizes the need to develop leadership skills in medical students during their medical schooling.¹⁰

In this study perspectives of house officers about their leadership qualities and process of leadership development during their undergraduate medical education is explored in depth. The perspective of leadership skills is categorized as priori themes of “NHS- Medical Leadership Competency Framework”. In “demonstrating personal qualities” the most highlighted qualities are self-management and self-awareness; in “working with others”; communication skills, and team work; in “management skills” time management, while in

Table I: Comments Verbatim of Perceived Leadership Skills with “Priori Themes”			
Comments verbatim with “Priori Themes” and sub-themes	FGD1 N (%)	FGD2 N (%)	Total N (%)
Theme 1: Demonstrating personal qualities	23(37.09)	24(40.68)	47(38.84)
Self-management	12(19.35)	14(23.73)	26(21.49)
1. I am more determined and persistent now.			
2. I am much more confident of myself as compared to my past.			
3. I always try to keep myself calm during stress.			
4. The thing that I learned the most is “commitment”.			
Self-awareness	08(12.90)	05(8.47)	13(10.74)
5. I think I am aware of myself, about my qualities and about what I really lack, and I can work on it.			
6. I have also developed the quality of creativity and innovation in all these years.			
Acting with integrity	03(04.84)	05(8.47)	08(6.61)
7. We learn professionalism from our seniors that inspire us in many ways.			
8. I have learned that every time you should speak truth.			
9. I have developed work ethics.			
Theme 2: Working with others	20 (32.26)	17(28.81)	37(30.58)
Communication Skills	13 (20.97)	12(20.34)	25(20.66)
10. I know how to console people about their disease if I am dealing with the patient.			
11. I can communicate better now with others, with patients, their attendants and with my colleagues.			
Team work	07(11.29)	05(8.47)	12(9.92)
12. I know how to work with others, involving others, helping others, and doing team work for particular purpose.			
13. I share my knowledge with my colleagues and try to improve their skills also.			
14. I have learned to motivate others, and encourage them.			
3. Improving Services	09(14.52)	07(11.86)	16(13.22)
Empathy/ Humanity	07(11.29)	07(11.86)	14(11.57)
15. I am more empathetic to patients and everyone.			
16. During my experience in wards I became empathic person.			
17. “Humanity”, if you do not have humanity you cannot be a leader.			
Ensuring patient safety	02(3.23)	0(0.00)	02(1.65)
18. I think about patients much more critically and with their beneficial needs.			
19. I have acquired medical competency.			
4. Management Skills	05(8.06)	07(11.86)	12(9.92)
Time Management	02(3.23)	05(8.47)	07(5.59)
20. I know how to manage my time.			
Resource Management	02(3.23)	02(3.39)	04(3.31)
21. The leadership qualities I developed during my undergraduate teaching include management skills.			
22. We have limited resources at times and we have to make up most of what we have.			
Managing Critical Situations	01(1.61)	0(0.00)	01(0.83)
23. How to deal in situations that are out of hand.			
Theme 5. Setting direction	05(8.06)	04(6.78)	09(7.44)
Setting & achieving targets	05(8.06)	02(3.39)	07(5.79)
24. How to set goals and to achieve them as well.			
25. “Positive attitude”, I always remain hopeful towards my goal.			
26. “Never give up” which I have learned during my education system.			
Decision Making	0(0.00)	02(3.39)	02(1.65)
27. How to make decision in this profession.			
28. I have learned how to utilize persons and their qualities at right time and right place.			
Total	62(100)	59(99.99)	121(99.99)

“improving services”; empathy, and in “setting direction”; setting and achieving targets were perceived leadership skills by both groups (Table I). Varkey et al explored the perspective of medical students about their leadership qualities and concluded that 90% of medical students perceived themselves as competent in communication skills, 70% in conflict resolution, and 65% in time management.¹¹ A multi-institutional study was conducted in the UK to assess the perception of undergraduate medical students about medical leadership.

It revealed that highest-ranked qualities were acting with integrity, organization, and motivating others i.e. 93.8%, 77.2% and 76.3%. However, 63% of the cohort felt that they would like to have more leadership training in their medical schools.¹²

Gender based comparison of leadership qualities among male and female house officers did not reveal any significant difference in the current study. A quantitative study on ‘gender and medical leadership’ conducted in one

Table II: Comments Verbatim of “Contributing Factors” in Leadership Development				
Themes & Sub-themes	Quotes	FGD1 N (%)	FGD2 N (%)	Both group N (%)
Theme 1: Faculty-related factors		32(51.61)	39(55.71)	71(53.79)
Extracurricular/ Co-curricular activities	I have learned time management and organization skills by being part of the ‘literary society’ and ‘dramatics society.’ I learned “team work” by being captain of basketball team.	14(22.58)	16(22.86)	30(22.73)
Curricular activities	I am better in interacting with people now; it all became possible because of the tutorials that are conducted in our college. We had a subject of behavioral sciences that told us about empathy. I have learned from clinical rotations; dealing with other students, dealing with patients.	10(16.13)	13(18.57)	23(17.42)
Teachers	By looking up to my teachers, I have developed work ethics.	08(12.90)	10(14.29)	18(13.64)
Theme 2: Environment-related factors		10(16.13)	08(11.43)	18(13.64)
College environment	There were various conditions in this whole tenure that we have to undergo mainly prof which is a stressful period, I have learned how to keep myself streamlined during this period. Time management, persistence and determination; prof is the reason I must say that helped me to be focused.	08(12.90)	06(08.57)	14(10.61)
Hostel environment	There were many conflicts related to everything so I learned to resolve all the conflicts being part of hostel so that helped me to resolve conflicts.	02(3.23)	02(02.86)	04(3.03)
Theme 3: Student-related factors		03(4.84)	04(05.71)	07(5.30)
Working in groups	Group study allowed me to extract positive things from colleagues to have a positive approach.	03(4.84)	04(05.71)	07(5.30)
Theme 4: Pre-medical school experience		17(27.42)	19(27.14)	36(27.27)
Extracurricular/co-curricular activities	There were inter school championships, interschool competitions that made me self-aware of qualities I already have in myself. When there were small groups of dramatics and assemblies; those were actually showing me management, and discipline.	12(19.35)	12(17.14)	24(18.18)
Curricular activities	Whenever I had class tests in my school or my college. They were showing to me how to be time committed.	03(4.84)	06(08.57)	09(6.82)
Teachers	My teachers always motivated me. I learned professionalism from teachers.	02(3.23)	01(1.43)	03(2.27)
Total		62(100)	70(99.99)	132(100)

medical school in the UK reported that 77% of the respondents also stated that gender was irrelevant.¹³

The process of leadership development was explored in three dimensions such that contributing factors, potential obstacles, and suggested improvements to enhance leadership skills acquisition. This study reveals that the faculty-related factors contributed most in leadership development. Regarding faculty-related contribution, house officers expressed that they developed most of the leadership qualities due to “extracurricular and co-curricular activities” i.e. 30 (22.73%). Literature reveals that extracurricular activities play a vital role in inculcating leadership traits.¹⁴ Most of the leadership programs are designed to provide cohesive leadership and degree prospectus while the school of Medicine at the University of Wisconsin adopted a longitudinal leadership program

based on extra-curricular activities. Similarly “extracurricular leadership development program” was started at King Abdul Aziz University, Jeddah, Saudi Arabia to prepare physician leaders, and 65% course participants reported intended changes in their leadership practices immediately after the programme.¹⁴ With respect to faculty-related factors, study participants also enlightened the role of “curricular activities”, and “teachers” in leadership development. So teaching leadership to undergraduate medical students is as important as teaching technical and academic competencies. Faculty development programs on medical leadership are also crucial to foster its development.¹⁵ Pre-medical schooling has a vital role in leadership development. In this context most contributing elements were again “extracurricular activities” followed by

Table III: Comments Verbatim of “Obstacles Faced” in Leadership Development

Themes & sub-themes	Quotes	FGD1 N(%)	FGD2 N(%)	Both groups N(%)
Theme 1: Faculty-related obstacles		07(46.67)	19(61.30)	26(56.52)
Student- teacher communication gap	Teacher should interact with them with more time giving to their students. I think a teacher is much like a parent & if he can't solve issues of his students then he is not a teacher.	03(20.00)	04(12.90)	07(15.21)
Lack of extracurricular activities	There is particular time for a week and then in the whole year there are no further sports activities.	02(13.33)	04(12.90)	06(13.04)
Lack of psychological support	We have never been counseled about the peer pressure.	01(6.67)	05(16.13)	06(13.04)
Lack of career counselling	I faced the most is “lack of career counselling”.	01(6.67)	03(09.68)	04(8.69)
Favoritism by teachers	When teacher is focusing on a single student sitting among a bunch of students then other students get discouraged.	0(0.00)	03(09.68)	03(6.52)
Theme 2: Environment related obstacles		08(53.33)	08(25.80)	16(34.78)
“Too many rules”	The potential obstacle that I faced in all these years was “too much rules”.	03(20.00)	05(16.13)	08(17.39)
Hostel environment	We have language issues with our colleagues with whom we are sharing the room or we have change of mind issues.	02(13.33)	02(6.45)	04(8.69)
Lack of social interaction	I think social interaction should be more which is lacked in this college.	02(13.33)	0(0.00)	02(4.34)
Lack of motivation	We are living in hostel & only motivation source we are having is our teachers & our seniors. So if it is lacking that, we cannot become a better leader & this is the biggest potential obstacle.	01(6.67)	01(3.22)	02(4.34)
Theme 3: Student-related obstacles		0 (0.00)	04(12.90)	04(8.70)
Interpersonal conflicts	In different teams there is difference of opinion which creates a lot of trouble for the team work so this needs to be addressed.	0(0.00)	02(6.45)	02(4.34)
Lack of support of fellow students	While we are doing our professional study there is the factor of jealousy. One student is getting the higher marks and he is at the higher rank, the other student is getting jealous	0(0.00)	02(6.45)	02(4.34)
Total		15(100)	31(100)	46(100)

“curricular activities” and “teachers”. The current study unfolds that extra-curricular activities during pre-medical schooling contributed in the development of most of the leadership skills like self-awareness, self-managemnt and discipline. The literature revealed that “Arts Program” in summer camps promotes lifelong leadership abilities like teamwork, conflict resolution and tolerance.¹⁶ Moreover role of “mentoring” and “peer learning” is of prime importance to develop leadership skills. Principals and faculty members of high schools should be trained about school culture, executive leadership, and strategic planning to inculcate leadership in students at a basic level.¹⁷

Most encountered potential barriers in leadership development are faculty-related including “student-teacher communication gap”, “lack of extra-curricular activities”, “lack of psychological support”, lack of career counseling, and favoritism by teachers. Environment-related obstacles as identified by the study participants are

too many rules, hostel environment, lack of social interaction, and lack of motivation. Moreover, it is highlighted that interpersonal conflicts and lack of support of fellow students are student-related elements that impede leadership development. A study conducted by Dohertsy et al found that lack of awareness, lack of formal training, lack of support by seniors, time constraints, and limited resources were the major barriers in leadership development.¹⁸ Addressing these barriers can play key role in leadership development.

Study participants emphasized mainly on faculty-related improvements to enhance leadership skills. In this regard house officers suggested that “promoting extracurricular, and co-curricular activities” (17.19%), “active learning of students” (12.50%) , “enhancing teachers’ support” (11.72%), “psychological support” (7.81%), “career counselling” (4.69%), “promoting research work” ((3.91%), “regular clinical teaching” (3.13%), “ensuring equal opportunities for all students” (1.56%) and “conducting workshops and seminars”(1.56%) may

Table IV: Comments Verbatim of “Suggested Improvements” for Leadership Development				
Themes & Sub-themes	Quotes	FGD1 N (%)	FGD2 N (%)	Both group N (%)
Theme 1: Faculty-related improvements		42(64.60)	40(63.50)	82(64.07)
More Extracurricular activities	By organizing co-curricular and extracurricular activities; while organizing these events authority should be “student body”. There should be more intercollegiate programs.	13(20.0)	09(14.29)	22(17.19)
Active learning	Participation of students in class must be enhanced. Students should be given chances to give presentation on stage.	09(13.84)	07(11.11)	16(12.50)
Enhancing Teachers’ support	I think teachers should be more supportive & more interactive with the students. Teachers should allow students to know their inner strength.	05(7.69)	10(15.87)	15(11.72)
Psychological support	If someone has failed their exam, why should we not talk to those students, being a teacher? We should communicate with them.	08(12.30)	02(3.17)	10(7.81)
Career counselling	Students should be counseled about career from the very 2nd year or 3rd year when the clinical rotation actually start.	01(1.53)	05(7.94)	06(4.69)
Promoting research work	More research facilities for the students to enhance leadership skills	03(4.61)	02(3.17)	05(3.91)
Regular clinical/practical teaching	If student is given more practical work than just reading books then it will improve their learning qualities.	02 (3.07)	02(3.17)	04(3.13)
Ensure equal opportunities for all	Students those are sitting on the back benches are ignored always.	01(1.53)	01(1.59)	02(1.56)
Workshops & seminars	A day should be confined to those talks in which our teachers would tell us how to be self-aware, how to be empathetic and how to develop these leadership skills. College must organize workshops and seminars for the reinforcement of these skills.	0 (0.00)	02(3.17)	02(1.56)
Theme 2: Environment related improvements		20(30.77)	18(28.57)	38(29.68)
Administrative support	Administration should support to facilitate students ideas.	07(10.76)	06(9.52)	13(10.15)
Financial support	College should provide students ample funds so that students can carry out extracurricular activities more actively than before.	05(7.69)	05(7.94)	10 (7.81)
Student committees	There must be students’ committee who will be reportable to college and committee will organize all events like sports week, debates, dramatics or whatever happens in college.	04 (6.15)	03 (4.76)	07(5.47)
Motivational support	Nobody should be rewarded first, 2 nd & 3 rd only; I think participation certificate, appreciation certificate should be given as well.	02(3.07)	02(3.17)	04(3.12)
Friendly hostel environment	Living in the hostel, when you are away from your parents makes you stressed; give students friendly environment in the hostel.	02(3.07)	02(3.17)	04(3.12)
Theme 3: Student-related improvements		02(3.07)	05(7.94)	07(5.47)
Goal setting	Students should also set their goals so that they can execute them and achieve them too.	01(1.53)	01(1.59)	02 (1.56)
Colleagues support	We should be tolerant enough and way more accepting regarding the success of our fellows rather than pulling their legs back. We should be more supporting to each other.	0(0.00)	02(3.17)	02(1.56)
Rectification of problems	We must create an atmosphere to resolve and rectify all those problems that we have faced as a student in our medical education	01(1.53)	01(1.58)	02(1.56)
Identification of shortcomings	We should identify our short comings that where we are lacking.	0(0.00)	01(1.59)	01(0.78)
Theme 4: Family-related improvements		01 (1.54)	0(0.00)	01(0.78)
Family support	Family support is very important	01(1.54)	0(0.00)	01(0.78)
Total		65(99.99)	63(100)	128(100)

enhance leadership qualities among medical undergraduates. So “faculty training” is very important as it is reported that the health care personnel who attend faculty development programs on leadership are better prepared to face the emerging challenges in education and medical leadership.⁹ About environment-related improvements students suggested that provision of

administrative, financial, and motivational support may help acquire leadership skills. Regarding student-related improvements, it was proposed that “goal setting”, “colleagues’ support”, “and rectification of problems” and “identification of their shortcomings” may augment the process of leadership development. According to trainee doctors of Northern Ireland; leadership skills can be

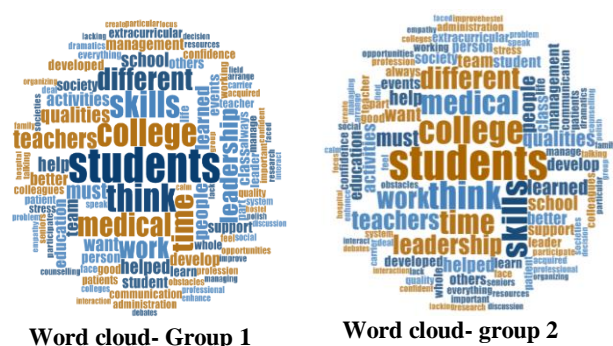


Figure 1: Comparison of word frequency of two focus group discussions

enhanced by improving awareness about medical leadership, formalizing leadership roles during training, and providing opportunities.¹⁹ Formal education and training of leadership skills by mentorship should be incorporated in the curriculum at an early stage to promote awareness, understanding, and development of medical leadership.¹⁸ Literature reported that implementation of faculty development programs in medical education led to positive developments in faculty and students.²⁰ Moreover leadership standards of school administrators have a significant impact on students' achievement. So support of faculty and administration of the institutions is important to inculcate leadership skills in medical students.²¹ Attitudes and opinions of students of one of the UK medical school towards medical leadership in the undergraduate curriculum were sought by Quince et al. It revealed that structured observation, reflection, critical appraisal and analysis of mistakes should be integrated in the curriculum of medical undergraduates.²² The basic concepts of leadership should be introduced to the medical students early in their foundation years as clinicians in leadership role have beneficial effects on health care system.^{19, 23}

In this qualitative study perspective of house officers about "medical leadership" during their undergraduate medical education was explored in-depth because they are freshly graduated, having gone through all years of studentship recently, and major stake holder of the health care system. It is a single centered study; the perspective of students may be different at different institutions so transferability should be considered while interpreting the results.

Conclusion

Leadership skills perceived by the study participants were the same as priori themes given in "NHS Leadership Framework" namely "demonstrating personal qualities"

i.e. self-management, self-awareness, acting with integrity; working with others i.e. communication skills,

teamwork; improving services i.e. empathy, ensuring patient safety; management skills i.e. time management, resource management, managing critical situations and setting direction i.e. setting and achieving targets, decision making. An interesting trend was found in this study that faculty-related factors were the most contributing element in leadership development on one hand and most encountered potential obstacles were also faculty-related. Most emphasized improvements to enhance leadership development were again faculty-related.

Disclaimer: This study is conducted as a requirement of MCPS-Health Professions Education Programme of College of Physicians & Surgeons Pakistan.

References

1. Silva A. What is Leadership? J Bus Stud quart. 2016; 8:1-5.
2. Jonas S, McCay L, Keogh B. The importance of clinical leadership. In: Swanwick T, McKimm J, editors. ABC of clinical leadership. Chichester (UK): Wiley-Blackwell; 2011. p.1-3.
3. Warren OJ, Carnall R. Medical leadership: why it is important, what is required, and how we develop it. Postgrad Med J. 2011; 87:27-32. <https://doi.org/10.1136/pgmj.2009.093807>
4. Institute of Medicine. Academic health centers: Leading change in the 21st century Washington, DC: National Academy Press. 2004.
5. House JR, Aditya RN. The Social Scientific Study of Leadership: Quo Vadis? JOM. 1997; 23:409-73. <https://doi.org/10.1177/014920639702300306>
6. Medical Leadership Competency Framework. Enhancing engagement in Medical Leadership. NHS Institute for Innovation and Improvement and Academy of Medical Royal Colleges; 2010.
7. Enders T, Conroy J. Advancing the academic health system for the future: A report of the AAMC health advisory panel. 2014. The Association of American Medical Colleges. Washington, DC.
8. Frank JR, Snell L, Sherbino J, editors. CanMEDS 2015 Physician Competency Framework. Ottawa: Royal College of Physicians and Surgeons of Canada; 2015.
9. Laksov KB, Tomson T. Becoming an educational leader-Exploring leadership in medical education. Int J. Leadersh. Educ. 2017; 20:506-16. <https://doi.org/10.1080/13603124.2015.1114152>
10. Dickerman J, Sanchez JP, Portela-Martinez M, Roldan E. Leadership and academic medicine: preparing medical students & residents to be effective leaders for 21st century. Med edportal 2018; 14: 10677. https://doi.org/10.15766/mep_2374-8265.10677
11. Vakey P, Peloquin J, Reed D, Lindor K, Harris I. Leadership curriculum in undergraduate medical education: A study of student and faculty perspectives. Med Teach. 2009; 31:244-50. <https://doi.org/10.1080/01421590802144278>
12. Rouhani MJ, Eleanor JB, Hobbs C, Dunford C, Osman N, Gan C, et al. UK medical students' perceptions, attitudes, and interest towards medical leadership and clinician managers. Adv Med Educ Pract. 2018; 9: 119-24. <https://doi.org/10.2147/AMEP.S151436>
13. Crolla E, O'Sullivan H, Bogg J. Gender and Medical Leadership: Student Perceptions and Implications for Developing Future Leaders in Primary and Secondary Care-a pilot study. J of Prim

- Care Community Health. 2011; 2:225-28. <https://doi.org/10.1177/2150131911409413>
14. Ayuob NN, Sayes FMA, Deek BSE. Extracurricular leadership development program to prepare future Saudi physicians as leaders. JPMA. 2016;66:688-93.
 15. Chen TY. Medical leadership: An important and required competency for medical students. Tsu Chi J. 2018; 30:66-70. https://doi.org/10.4103/tcmj.tcmj_26_18
 16. LeMire SD, Achtenberg L, Opp D. Leadership development for High Schools in a Summer Performing Arts program. Journal for learning Through the Arts. 2017;13: 1-9. <https://doi.org/10.21977/D913121595>
 17. Tingle E, Corrales A, Peters ML. Leadership development programs: investing in school principals. Educational Studies. 2017;45: 1-16 <https://doi.org/10.1080/03055698.2017.1382332>
 18. Dohertysy R, Lawson S, Laughlin LM, Donaghy G, Courtney J, Gardiner K. Developing leadership as a trainee-opportunities, barriers and potential improvements. Ulster Med J. 2018; 87:117-20.
 19. Sonsale A, Bharamgouder R. Equipping future doctors: incorporating management and leadership into medical curriculums in United Kingdom. Perspect Med Edu. 2017; 6:71-75. <https://doi.org/10.1007/s40037-017-0327-3>
 20. Matsika A, Nathoo K, Borok M, Mashaah T, Madya F, Connors S. Role of faculty Development Programs in Medical Education at the University of Zimbabwe College of Health Sciences, Zimbabwe. Annals of Global Health. 2018; 84:183-89. <https://doi.org/10.29024/aogh.5>
 21. Aksoy M. The standards of school administrators and leadership. JILSES .2016; 2:12-18.
 22. Quince T, Abbas M, Murugesu S, Crawley F, Hyde S, wood D et al. Leadership and management in the undergraduate medical curriculum: a qualitative study of students' attitudes and opinions at one UK medical school. BMJ Open. 2014; 6:e 005353. <https://doi.org/10.1136/bmjopen-2014-005353>
 23. Hadley L, Black D, Reynolds P, Penlington C. Encouraging formative assessments of leadership for foundation doctors. Clin Teach. 2015; 12:231-35. <https://doi.org/10.1111/tct.12289>