Original article

Communities of Practice: Redressal of Medical Education Leadership Challenges through a Workplace-Based Learning Approach

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ABSTRACT

Background: There is a realization that learning leadership skills is beyond classroom teaching and requires leaders to participate in communities of practice (CoP) that enables them to learn from the wisdom of seasoned leader because such leaders don't ask budding leaders to follow their instructions, they rather set examples of best practices in medical education. However, dearth of published evidence both locally and internationally suggests that there is a need to investigate how have communicates of practice impacted leadership skills of physicians as medical education leaders.

Participants and Methods: After a formal approval from the IRB, a transcendental phenomenological study was conducted, involving seven physician leaders working as medical teachers from both basic and clinical sciences, heading the medical college and/or their departments as professors in a medical college on the basis of convenience sampling and their experiences as medical education leaders who had presumably experienced the phenomenon of 'learning leadership skills'. The researcher conducted hour-long one-on-one interviews with participants at their workplace offices and one interview was conducted at the researcher's home office. One of the participants was interviewed twice as additional gaps were identified from the initial analysis. Interviews conducted in the surgeon's office were interrupted many a times by theatre assistants, but the continuity was resumed successfully. The qualitative data was analyzed manually by using the Stevick-Colaizzi-Keen method.

Results: One major theme namely 'communities of practice impacting leadership skills' emerged from the transcripts whereas, two subthemes namely 'gaining wisdom' and 'uplifting emotional wellbeing' were identified as main aspects that had a major influence on leadership skills of physicians in the medical education milieu.

Conclusion: CoP has a positive impact on leadership skills. It enables leaders in medical education to learn wisdom to solve difficult leadership problems. Evidence supports that CoP also uplifts emotional wellbeing of leaders by preventing their burn out.

Keywords:
Medical education leaders, communities of practice, leadership skills, collective wisdom, emotional wellbeing

INTRODUCTION

Communities of practice (CoP) are considered useful as a workplace-based learning approach for leadership development. CoP consist of a group of people who share a mutual concern or a passion for something they do and learn how to do it better as they interact regularly. Such groups are called professional platforms or professional communities of practice when they are constituted to share knowledge by personnel from a similar educational and professional background. CoP play a significant role in implementing change and in imparting leadership skills within a complex healthcare system[1]. Within CoP, participants are encouraged to reflect on their leadership skills and practices and share them with other members of this learning community[2].

Braun et al. state that aspiring leaders learn through CoP by means of modelling, scaffolding, and coaching by senior members as full participants of the community[3]. The learning experience within CoP invites individual learners to reflect, explore, and articulate their understanding and concerns regarding leadership challenges with other members while moving from the peripheral position within a CoP to the center as a full participant[4,5,6].

Virtual Communities of Practice (VCoP) in the healthcare sector are gaining popularity among health professionals as they facilitate exchange of knowledge and expertise through social interactions across the world. Through VCoP leaders learn a collaborative style of leadership, which enables educational leaders to implement change more effectively[7]. However, the role of communities of practice in improving leadership skills is not yet explored in Pakistan and needs to be investigated in medical education both locally and internationally[8]. Hence, this study was designed to

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explore how communities of practice impacted leadership skills of medical education leaders at one of the private sector medical institutes in the north-eastern city of Punjab, Pakistan.

PARTICIPANTS AND METHODS

A transcendental phenomenological[9] study was conducted at a large, private medical college and its affiliated tertiary care hospital. There are around 300 faculty members and nearly 750 MBBS students within the institution. The participants of this study included medical education leaders from both basic and clinical sciences who were working as medical teachers for undergraduate medical education. They were registered with the PM&DC as regular faculty members associated with the medical institute and its affiliated hospital. Participants were selected on the basis of access i.e. nonprobability convenient sampling technique and their practices as medical education leaders who had experienced the phenomenon of 'learning leadership skills' for five or more years. The participants were either heading the institution and/or their departments as professors. They had competing responsibilities of teaching and managing patients and they were also leading a team of health professionals, involved in the administration of resources, decision making, and other leadership responsibilities. Whereas, learning leadership skills included learning to implement change at the institutional or departmental level. In addition, learning to foster a trusting, collaborative, innovative, and productive environment were also considered important leadership skills to be mastered[10].In this study, CoP are defined as learning from more experienced colleagues at the workplace. CoP provide a professional network or a platform which can be available both face-to-face and online in a formal or informal manner. This platform allows professionals to seek advice on issues of common interest. CoP are comprised of junior to senior members with years of accumulated wisdom and common educational and professional interests[15].

After permission from the dean to gain access to the faculty members for interviews and approval from the Institutional Review Board, data collection was conducted through interviews from seven participants because saturation of data was verified through initial analysis[9]. Hour-long one-on-one in-depth interviews were arranged at the workplace offices after seeking the written informed consent from each participant. One of the interviews was arranged at the researcher's home office due to flow of COVID positive patients in the participant's outdoor clinic. One of the participants was interviewed twice due to a need to collect additional data.

A semi-structured interview protocol was used by the researcher with interview questions and relevant probes and prompts. Interviews were recorded with permission from the interviewees and field notes were taken by the researcher. Participants were informed before the interview that the researcher would not call them by their names to maintain confidentiality. They were also informed that the recorded interviews would be assigned code numbers to protect their identities. The transcribed data was manually analyzed using Stevick-Colaizzi-Keen method[9].

The analysis started with the description of the researcher's experience of the phenomenon of 'learning leadership skills' so that it could be set aside (bracketing) in an attempt to focus on participants' experiences. It was followed by the process of horizontalization that involved developing a list of significant statements from the interviews and from the field notes about the experience of participants regarding the phenomenon. Next, the description of 'what' was created, which was related to participants' experience with the phenomenon. This was triangulated with the field notes and literature for textural description of the experience and included verbatim quotes. In the next step of structural description, 'how' the experience happened was entailed, reflecting on the setting and context where the phenomenon was experienced. To establish the credibility, triangulation of data was completed through corroboration of data collected from a variety of sources like interviews, field notes, and literature about the research question for interpretation of data. Confirmability of findings was addressed through member checking[9] by seeking participants feedback on transcripts and involving another researcher to verify results.

RESULTS

The demographic data is summarized in Table 1 that shares the sample size, frequency of participants by discipline and designations, their gender, average age, and average teaching/professional experience in years.

Significant statements were given codes and common codes were subsequently assigned an appropriate theme and two sub-themes namely: communities of practice impacting leadership skills, gaining wisdom, and uplifting emotional wellbeing respectively, as discussed below.

Table 1: Demographic Data of Participants (*n*=7)

Average Age of Participants	Frequency of Participants by Gender		Frequency of Participants by Discipline & Designation	Average Teaching/Professional Experience
59.14 yrs.	5 Males	2 Females	Professor of Gynae & Obstetrics & Dean (1) Professor of Medicine & Principal Medical College (1) Professor of Surgery (1) Professor of Urology (1) Professor of Psychiatry/ Behavioral Sciences (1) Professor of Pharmacology & Associate Dean (1) Professor of Physiology (1)	22.85 years.

Communities of Practice Impacting Leadership Skills: All seven participants deemed CoP a wonderful opportunity at their workplace to have a legitimate participation in an academic discourse for finding solutions to leadership dilemmas and for seeking emotional support from friends and colleagues. These leaders considered CoP as a practice to consult their peers, and senior and junior colleagues and to gain more wisdom about professional leadership, and/or personal problems. Participant 1 explained:

"*I always consult my colleagues. Whenever there is a new thing, I always consult my colleagues… we are three professors in the department and two assistant professors. I always call them and whenever there is a task, I consult them. But, whenever there is a bigger problem, I consult my senior colleagues from the Pharmacology Society of Pakistan, which is under the process of being registered. I am president for the last two years of that society.*"

Platforms used by medical education leaders for CoP were one-on-one or group meetings at the workplace such as personal offices within the institution and departments, conference halls, and one's residences.

Gaining Wisdom: All participants were convinced that consulting senior and junior colleagues within one's department and contemporaries in other departments was valuable in finding feasible solutions to leadership and miscellaneous professional issues. They felt that reaching out to colleagues provided support in handling professional challenges that initially seemed insurmountable. Participant 5 said:

"*Yes, I do consult peers. At times it is very useful. Once, I talked with one of my colleagues that I was trying to launch a program and I had difficulties like I was not getting permission from the administration. His answer was very interesting. He told me, 'If I really want to develop a program then I should not expect to earn from it'.... and I believed in that and when I said okay... I am not going to earn from it, it sailed so smoothly. I am really proud of this achievement!*"

In a hospital context, seeking advice was leaders' second nature as they or their junior colleagues would frequently encounter difficult cases. Most importantly, leaders working in the hospital were expected to set a precedent of consulting others when in difficulty. Participant 3 emphasized,

"*Absolutely yes, why not...I mean...like why won't you take a younger brain's input, why won't you? If they are not good at giving input, then I'm at fault because I've nurtured them.*"

Uplifting Emotional Well-being: One participant communicated the need to connect with friends and professional colleagues to counter emotional burnout and acknowledged CoP as an informal opportunity to socially interact with friends and colleagues. Participant 7 shared her emotionally draining experience of handling leadership challenges as a dean during the solitary phase of COVID-19 lockdown. She confided:

"*Initially we were not meeting anybody due to COVID-19 lockdown. Everybody was isolated. Though, of course, we were connected through telephone but then we thought that visiting each other would help us more. Taking all precautions, we started doing that...very close friends...and...of course the heads of my institutions, we started meeting with each other. That really helped us. We shared our experiences that gave us strength. We realized that we were on the same boat and not alone in that situation. I think that is human psychology…because... humans are social animals.*"

Participant 7 also discussed social interactions with colleagues that were described as informal CoP that helped combat stress during the initial process of developing the online learning management system (LMS) policy during the COVID-19 lockdown. The policy was developed as a result of informal discussions between the dean and principals of the medical and dental colleges.

DISCUSSION

All participants discussed the strong impact of CoP on their leadership skills. The leadership skills refined through participation in CoP were problem solving, decision-making, and the ability to steer curricular change. Additionally, social interaction through informal CoP helped leaders build up their emotional resolve. The results revealed that many of the leaders had created informal CoP within their departments and institutions. Formal CoP were organized as meetings to develop consensus on curricular change and difficult policy decisions, such as online examination during the COVID-19 lockdown. The participants found that interaction with likeminded individuals on professional challenges provided an unmatched opportunity to learn from each other and find creative solutions. Published evidence also describes a similar role of CoP in healthcare institutions where CoP are frequently employed to analyze an institution's performance and to encourage collaborative culture and knowledge utilization. Organizations like the National Health Services (NHS) of UK recommend that for a sustainable change within an organization, it is vital to link the process of change with active CoP[11]. Informal CoP functions as morning meetings to discuss difficult clinical cases or academic challenges. Home-based meetings with colleagues were another way of operating informal CoP where policy matters were discussed, and difficult decision-making was done through collective wisdom. The participants believed that their personal relationship with colleagues was an important factor in the success of an informal approach to seek help and advice. Evidence endorses that informal CoP are more effective in terms of their sustainability and ownership by the members in a medical education context. It is argued that CoP thrive because of already existing relationship between surgeons[8,11].

The findings of this study suggest that institutions should invest in CoP for achieving important institutional vision because CoP is an effective currency for institutions to create new knowledge and enable implementation of change. In this way CoP can become a roadmap to achieving what is most important for an institution. The new knowledge is created through a discourse between professionals, which is helpful in informed decision-making[12-14]. The results pointed out that decision-making through informal CoP enabled the institution to ensure on-line faculty training, quality education, and student assessment during the COVID-19 pandemic. These decisions were implemented in a timely fashion due to faculty buy-in and resulted in elevating the institution's reputation. Since CoP's contribution enables an institution's growth, it is therefore prudent to take steps to enhance productivity of CoP through incentives such as certificates of appreciation and resources for creating and maintaining a professional platform within the organization, which may also help in nurturing and emotionally supporting leaders. It is established that when professionals come together in a CoP to discuss professional challenges, they create implicit knowledge regarding how to tackle the challenges at hand. Consequently, established CoP generate unique cognitive cultures that continue evolving with the passage of time[8,15]. Findings of this study indicated that during the COVID-19 pandemic, the institution created virtual communities of practice (VCoP) to help medical education leaders and other faculty members use technology to connect with each other for materialization of transdisciplinary projects. WhatsApp, Instagram, Facebook, and Twitter, all were used to build and maintain VCoP for collaboration on a variety of professional tasks.

This study highlighted that medical education leaders were prone to emotional burnout due to extraordinary expectations and a constant pressure to deliver results. They needed support to uplift their emotional wellbeing. The COVID-19 pandemic and the resulting lockdown brought in its wake unprecedented challenges such as economic and educational instability. One of the leaders shared that staying unruffled and making decisions that had an impact on hundreds of students and faculty members were among the biggest leadership tests. She explained that reaching out to colleagues and seeking their advice proved valuable in a socially isolated situation. Evidence suggests that the institution's responsibility as an enabler during difficult times cannot be underestimated. Likewise, the role of communities of practice in building social relationships through members' collaboration on a variety of projects cannot be undervalued[15,16]. Nevertheless, those who are willing to ask questions are always able to easily connect with other members of the community of practice[17].

Findings revealed that a private medical college and its affiliated tertiary care hospital setting offer opportunities to seek advice from colleagues through both formal and informal CoP that have an impact on leadership skills of physicians. A study reports that patients and administration have very high expectations from physician leaders. These healthcare leaders are also accountable for the trust students, patients, and society have in them. As a result, they are under a lot of pressure, leading to their burnout[18]. In addition,

medical education leaders face complicated situations with no easy solutions. Institutions should support and create dedicated CoP to provide intellectual and emotional help to leaders by likeminded professionals[19]. Moreover, there is a need to develop policies that can promote the culture of CoP which includes seeking help and asking questions from colleagues. As recommended by previous studies, such policies that support collaboration and social networking must be developed in high stake medical institutes[20].

The participants of this study were selected on the basis of convenience sampling from one institution only, which was a private sector medical college. For this reason, the findings of this study are not transferrable to public sector institutions. Participants' first language was not English. Therefore, some degree of communication gap while responding in English was inevitable. While every participant was given the option to respond in Urdu, only one participant used that option.

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