Development, implementation & evaluation of a leadership course for healthcare professionals: A pilot study in India

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Abstract

Leadership training in medical education is extremely important for faculty as they are not formally trained for the same and yet they have to assume leadership roles in various capacities in their professional life. This paper describes stages in development and implementation of one such leadership course in a healthcare institute in India, involving faculty from diverse specialties. The short term outcomes such as participants reactions and changes in attitudes was evaluated. Overall it was well received by the participants.

Keywords: faculty development; leadership

Introduction

“There is nothing in a physician’s education and training that qualifies him to become a leader”

Mathis, L.L. “The Mathis maxims: lessons in leadership” (Collins-Nakai R, 2006)

Leadership in medicine has never been more important than it is today. When we look at the healthcare institute the faculties have to work in various roles of teacher, facilitator, clinician, counselor, researcher and administrators. At all times it involves working with other faculties, patients, para-medical staff and students in various teams. This mandates use of not only subject knowledge, skills but significant amount of leadership qualities including task & relationship management for smooth functioning. Yet no one receives a formal training for leadership development and still is expected to learn it on job. Using soft skills can be easy for some but rather difficult for many others.
Especially if the institution has diverse specialties and involved in academics, research as well as patient care, it becomes imperative for them to work in unison to achieve best possible & sustainable outcomes.

With the increasing complexity of medical education and practice, and recognition of the fact that physicians must assume significant leadership roles, there has been an increase in faculty development activities designed to enhance leadership in medical education. These include formal training programs and fellowships; workshops and seminars; faculty internships; and mentoring programs (Steinert Y et al. 2012).

Although in India leadership development is taken as a part of faculty development programmes, there are no published reports regarding effectiveness or outcomes specific to leadership element.

Therefore need was felt to develop an exclusive leadership training programme relevant to our settings, implement and find out the outcomes on various levels. In this article we have described the design considerations, participants’ reactions of pilot module in single organization.

Methods

Setting

NKP Salve Institute of medical sciences is a private medical college, Nagpur affiliated to Maharashtra University of health sciences, Nasik, India. It has a dental, physiotherapy and nursing college run by same management in the same campus. It has a 1000 bedded hospital, 270 faculty members and nearly 1500 students including graduate and postgraduates studying at a given time.

Participants

Taking into account that this is a training programme in a pilot phase, small group was deemed suitable and hence the total number of participants to be 25. Applications were invited from faculty from all colleges voluntarily and selection was based on their specialty, age and experience. This was done to ensure diversity so as to facilitate a right mix of junior and senior faculties so that they can share their experiences, understand and learn from each others’ experiences. Work profile of all faculty members involved academic, administrative as well as clinical responsibilities in the institution.

Design considerations

The main focus of this intervention was leadership development (knowledge, skills and attitude) amongst the participants.

1. Guiding frameworks

The guiding frameworks were Leadership training course (Blumenthal DM, et al. 2014), LME course guide (Mennin, et al. 2017) and nine established best practices for designing effective leadership training interventions (Blumenthal DM, et al. 2014). Two central ideas- learning by doing and Learning in context were at the core of developing the curriculum.

2. Course length, timing and size

The course timing and length was designed to overcome typical logistical challenges of work schedules of faculties involved. It is a 2 months long course with four face to face contact sessions, online discussions, a project involving
real life problem and presentation of that project as a poster in the end. Extended support was offered for those who wish to continue learning after course completion.

3. **Resource persons**

We had two of our authors who did a formal online course (by AMEE based in UK) on leadership in medical education. Rest three had done FAIMER fellowship and advanced course in medical education technology, conducted many training programmes in medical education and soft skills training for many years. Since employing internal faculty gave us advantage of knowing the participants, local conditions and various context specific issues it was decided to recruit internal resource persons for this pilot programme. Their role was to design the curriculum, as a facilitator and mentor for project completion.

4. **Course content**

Five resource persons brainstormed and designed the contents and mode of delivery. A hybrid approach was implemented to develop the content ie. customizing various elements in external course material to our context and setting. Detailed course outline is given in table as follows:

**Table 1: Course contents**

| S No | Activity / Duration | Mode of instruction | Description of Content |
|------|---------------------|---------------------|------------------------|
| 1    | Pre contact session activity 2 weeks prior to start of first session | Online questionnaire based | MBTI personality assessment |
| 2    | First contact session **Full day 6 hours** | Large group discussion Role play Game – group communication | Leading self Leading with others Situational leadership Wellness |
| 3    | Online discussion 1-1 month Part 1 Part 2 | Online threads on Gmail | Leadership Styles, Goal setting, motivation, conflict & change management, communication skills Case scenarios |
| 4    | Second contact session- 1 hr | Small group discussions | Case scenarios |
| 5    | Third contact session **Full day 6 hours** | Large group discussion Role play Game- team building | Team building, delegation Educational scholarship Wellness – follow-up |
| 6    | Online discussions 2 1 month | Online google groups | One issue – one solution |
| 7    | Fourth contact session | Small group discussions | One issue- one solution |
| 8    | Fifth contact session **Full day 6 hours** | Large group discussions Individual participants presentations | One issue- one solution |

After drafting the structure it was validated from three experts. One was ex vice-chancellor of a medical university.
Second was director of a management training institute and third was a reputed educationist serving on the committee of University Grants Commission, India. The content was modified according to their feedback and final draft was prepared.

The course has following elements-

a. Theoretical concepts – taught in face to face and online session  
b. Case studies- discussed in face to face session  
c. Experiential learning- individual project to facilitate application of knowledge and skills gained to their personal context

5. Evaluation framework

We used a model of Kirkpatrick's four levels of evaluations for educational interventions adapted for health care interventions to guide the design of our evaluation framework Before the course began, we finalized a list of outcomes to evaluate, which included: Participants' reactions to the course (Kirkpatrick Level 1) and participants' attitudes towards leadership skills and leadership development (Kirkpatrick Levels 2a-b).

We assessed participants’ immediate reactions to the course with a survey which was administered to all participants after the course’s final session. This survey included questions about the course’s relevance to participants' roles and responsibilities, the effectiveness of different teaching methods and facilitators, and whether participants felt more prepared to address leadership challenges after taking the course. Responses to these questions were structured in five point likert scale format (“Strongly Agree,” “Somewhat Agree,” “Neither Agree Nor Disagree,” “Somewhat Disagree,” and “Strongly Disagree”). The survey also included free text questions which asked respondents about the course's strengths, weaknesses, and suggestions for improvement. The survey was designed by two resource persons and a survey design expert. One faculty member reviewed the survey, and deemed it to have adequate clarity, face validity, and content validity. Surveys were administered in face to face interaction. All survey responses were de-identified; participants were told that completion of a survey implied informed consent to use this information for research purposes.

In addition to this a focused group discussion was carried out to get the qualitative data for evaluation 2 months after the course was over. Data was recorded and common themes were extracted. This study was evaluated and deemed exempt by the Institutional Review Board (IRB).

Data analysis

Participants’ responses to likert scale questions were assigned a numerical value ranging from one (“Strongly Disagree”) to five (“Strongly Agree”). Using Microsoft Excel 2013 (Microsoft Corp., USA), we calculated mean response values for each question, and performed one-way T tests to determine if the mean value of all responses to a question was significantly different from three—the value corresponding to “Neither Agree Nor Disagree.” Free text responses to questions about course strengths and improvement needs were analyzed using the comparative source method. Two co-authors independently identified themes in participants' responses, then iteratively compared and refined their theme lists until they agreed on a common set of themes. Next, the evaluators independently quantified the number of distinct references to each theme in the responses. They repeatedly compared and revised their reference lists until they agreed on the number of references to each theme.
Results/Analysis

We received 41 applications and shortlisted 25, out of which 1 participant dropped out due to emergency on the day of first contact session. Details of participants is as follows:

Characteristics of study participants

Age (years)
25-40: 10
41-60: 14

Gender
Male: 09
Female: 15

Marital status
Single: 02
Married: 22

Specialty
Medicine: 09
Dentistry: 13
Physiotherapy: 02

All 24 participants completed the course and participated in post-course evaluation (100% response rate).

Most participants indicated that, as a direct result of the leadership course, they felt more prepared to face challenges arising with team members below them, at their level, and above them, and with non-physician colleagues. Seventy five percent of the participants also strongly or somewhat agreed that taking the increased their interest in pursuing additional leadership training, while all of them indicated that they would recommend the course to colleagues. Seventy six percent of the participants felt that the course needs periodic reinforcements to be more effective. Participants noted that the course “made them aware of their strengths and weakness as leader”, “practically addressed and provided tools to deal with issues that we face in real work life”. Responses from all participants on various questions is given in table as follows:

Table 2: Participants’ evaluations of leadership development course

| S No | Question                                                                 | Mean likert scale response | P-value* | Percent who strongly or somewhat agree with statement |
|------|--------------------------------------------------------------------------|---------------------------|----------|-------------------------------------------------------|
| 1    | Overall, the leadership course provided content that is relevant to my professional life. | 4.80                      | <0.0001  | 100%                                                  |
2 This course has changed my perspective to look at the situations differently

|   |   |   |
|---|---|---|
| 2 | 4.85 | <0.0001 | 100% |

3 As a direct result of the leadership course, I feel more prepared to face challenges that arise with team members below me (e.g. residents, medical students, etc…). at my level (e.g. my co-residents). above me (e.g. fellows, attendings, etc…).

|   |   |   |
|---|---|---|
| 3 | 4.56 | <0.0001 | 100% |
|   | 4.65 |   | 86% |
|   | 4.20 |   | 84% |

4 I found online discussions to be useful

|   |   |   |
|---|---|---|
| 4 | 4.15 | <0.0001 | 88% |

5 The course content of first contact session relevant to my professional life.

|   |   |   |
|---|---|---|
| 5 | 4.86 | <0.0001 | 100% |

6 The course content of Third contact session relevant to my professional life.

|   |   |   |
|---|---|---|
| 6 | 4.88 | <0.0001 | 100% |

7 The small group meetings( second and fourth contact session) sessions contributed significantly to my learning

|   |   |   |
|---|---|---|
| 7 | 4.90 | <0.0001 | 100% |

8 Taking this leadership course has increased my interest in pursuing additional leadership training and development opportunities.

|   |   |   |
|---|---|---|
| 8 | 4.25 | <0.0001 | 75% |

9 I would recommend this course to my colleagues.

|   |   |   |
|---|---|---|
| 9 | 4.85 | <0.0001 | 100% |

10 This course would be more effective if there are periodic reinforcements

|   |   |   |
|---|---|---|
| 10 | 4.60 | <0.0001 | 76% |

*P-values are one sided, and compare the means of participants’ likert scale responses to the number 3, which corresponds to the likert scale answer “neither agree nor disagree.

From the focused group discussions following themes emerged-

High satisfaction with program: Participants consistently found programs to be useful and of both personal and professional benefit. They also valued the practical relevance and applicability of the instructional methods used.

A change in attitudes toward organizational contexts and leadership roles: Participants reported positive changes in attitudes toward their own organizations as well as their leadership capabilities. Some reported greater self-awareness of personal strengths and limitations, increased motivation, and confidence in their leadership roles.

Gains in knowledge and skills. Participants reported increased knowledge of leadership concepts, principles, and strategies (e.g., leadership styles and strategic planning), gains in specific leadership skills (e.g., personal effectiveness and conflict resolution), and increased awareness of leadership roles in academic settings.

Changes in leadership behavior: Self-perceived changes in leadership behavior were consistently reported and included a change in leadership styles, the application of new skills to the workplace (e.g., departmental reorganization and team building). Participants mentioned that they understood that though most of the issues do not have tailor made solution, however, much can be achieved only if we could change the way we think about the approach towards solving that issue. If one way doesn’t work, there surely could be another way of dealing with it.

Features contributing to positive outcomes included the use of: multiple instructional methods; experiential learning and reflective practice; individual projects; peer support and the development of community of practice.

**Course strengths**

Participants’ comments about course strengths focused on the contents and interactive nature (fifteen comments), resource persons (twelve comments), practical skills learned from the course (fourteen comments), and the hands on
experience in dealing with real life issues (fifteen comments).

**Course weaknesses and recommendations for improvement**

Participants commonly mentioned about difficulty in time management for the online discussions sessions owing to their busy schedule. They preferred face to face contact session over online discussions.

**Discussion**

John Kotter, a world-renowned expert on leadership at Harvard Business School, defines leadership by what leaders do: they cope with change, they set direction, they align people to participate in that new direction, and they motivate people (Collins-Nakai R, 2006). Leadership skills are very important in all walks of life to become successful and field of medical education is no exception. Infact successful health care for the 21st century calls for diversification of leadership capabilities and management styles that will enrich our abilities to respond to the needs of all groups.

Faculty development refers to those activities that institutions use to renew or assist faculty in their roles effectively. Faculty development programmes in leadership development have gained popularity in past few decades across the world. However this is the first attempt in our country to develop and run exclusive leadership course (Kiesewetter J, 2013).

While designing the curriculum we focused on developing more inclusive style of leadership through influence, not authority; leadership by creating a shared purpose and a common vision, not by using position or power. We took into account our local problems, conditions and constraints. Rather than invite leaders of health systems, corporate executives, or business school professors to teach the pilot course, we recruited teachers from an internal pool of well-respected, experienced clinician-educators and clinician-leaders who were familiar with the leadership challenges that participants would likely face. Our decisions to design the course internally, and recruit internal faculty to teach in it, served as an opportunity for collaboration between faculties designing the course and improved its quality. Moreover, these decisions minimized the course’s financial costs.

The ethos of this programme was learning by doing framework wherein firstly participants were made aware of their own strengths and weakness by SWOT analysis done by each one of them. They worked upon their weakness during the entire duration of course which helped greatly to boost their confidence levels in dealing with even the most difficult of impossible situations. The second part focused on how to get along with others including team building, practicing assertive skills, situational leadership and so on.

The online discussions took care of many important topics such as leadership styles, change management, motivation and so on.

There were many unique features of this course, one of it is the case study method has been used in leadership training. Its strengths include focus on analyzing complex, real-life problems that lack simple solutions; simulating decision-making; and debating alternative viewpoints with colleagues—make it well suited for teaching participants about leadership challenges. Moreover, adult learners, often learn best through experiential modalities, including case discussions and simulations (Steinert Y 2012). The other is a session on developing educational scholarship. The feedback on this session was quite positive where participants mentioned that it was completely new perspective on strategic career development and very useful in their professional life. Session on wellness also was too appreciated and feedback comments were ‘a good tool for leading holistic life’, ‘motivational tool for healthy living’.

Our perception decides our attitude and if we change our perception towards looking at the situation, many issues
could be resolved. Therefore a need for actual implementation of the concepts taught in sessions was felt strongly. Inspired by AMEE LME course we also included hands on experience in dealing with real life issue that was taken up by each participant as a project. Various concepts and tools such as BATNA (best alternative to a negotiated agreement) table, which were explained in sessions need to be applied in practice and assessed for their utility. Issues taken up by participants ranged from interpersonal conflicts with colleagues, non-complying students, issues with seniors, management and so on. The purpose was not to solve the issue but to learn how to deal with it so that things start moving in positive direction. This project was presented by all participants on the last contact session and discussed extensively. The participants reflected upon this and felt that their perception about their problems changed during the course, they understood that most problems are not unique but generalized, they could look at the situation differently and were able to find effective solutions.

Regarding the course weakness we have decided to work out on time duration of online sessions to facilitate prompt and effective interaction. Although changes in organizational practice was not examined at this point, we will be examining it in due course of time.

**Conclusion**

In summary, leadership is the ability to make others succeed. This becomes very important factor for quality education and patient care in a heterogeneous environment of any healthcare institute. We implemented a multi-session leadership course pilot for faculties in health sciences education at a large academic medical center. This course was designed and taught internally, and included a number of unique elements, including business school style case studies about real life challenges in academic and clinical set-up and hands on experience of solving such issues. Initial course evaluations demonstrated improvements in participants’ knowledge and skills about leadership, attitudes towards future leadership opportunities and training, and anticipated leadership behaviors.

While preliminary and limited in scope, our work suggests that such programme can be taken as a guide, modified according to the settings, implemented and evaluated in multiple centers further so as to validate the results.

**Take Home Messages**

The core contents of leadership course emphasized on concepts such as- leadership has to do more with attitude than skill. One needs to be constantly associated with analyzing oneself with tools such as MBTI, SWOT analysis. Every person and each situation is different and needs to be handled differently. Different strokes for different folks is a workplace dictum and hence it is said that ‘it is so unequal to treat unequal people equally’. It is essential to develope educational scholarship as we progress in our career. To get things done effectively assertive communication is required and is key to interpersonal relationships and the transactions and appropriate skills to negotiate the transactions. Each situation is unique and does not have a tailor made solution. Changing the way we look at it helps in problem solving. Leadership and good health go hand in hand. The course was well received by the participants and can be replicated in other settings after contextulising the content.

**Notes On Contributors**

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Appendices

None.

Declarations

The author has declared that there are no conflicts of interest.

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Ethics Statement

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