ORIGINAL ARTICLE

JOURNEY OF EDUCATIONAL LEADERS IN BRINGING CURRICULAR REFORM IN MEDICAL EDUCATION IN PAKISTAN

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Background: Reforms in medical school need strong leadership to create an environment for effective adaptation. The aim of this study was to identify the challenges faced and strategies used by educational leaders during their journey of bringing the curricular reform at their respective institutions. **Methods:** This qualitative study was carried out across four institutes in Pakistan. Purposive sampling technique was used, and 14 medical educationists involved in curricular reforms participated. In depth semi structured interviews were conducted to explore the journey of educational leaders, the medical educationists who were involved in guiding the faculty in improving the educational processes in the institutes. Thematic analysis of the interviews was done. **Results:** The major challenges identified can be broadly grouped into two categories: student and faculty related. The underlying common principle in the journey of leaders was to remain aware of the emerging situations and take decisions accordingly. **Conclusion:** As leaders navigating the change, they must be prepared for the uncertainty and unexpected events and adapt themselves to the changing environment, and deal with perseverance.

Keywords: Educational leaders, Curricular Reforms, Change

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INTRODUCTION

Reforms in medical education has been an ongoing process since Flexner's time.[1] Flexner voiced his concerns about the process and product of the medical schools in America[2] and since then medical education has been in a state of unrest.

Pakistan has more than a hundred recognized medical schools, yet most of them are following discipline-based curriculum and only a minority have included new pedagogical approaches and reforms in curriculum.[3] The need for change has been noted and accepted to some extent but bringing the change has not been an easy endeavor.[4] Recently in May 2018 Pakistan medical and dental council revised their standards for medical education. Although the standards are only a single part of the recognition process, but this has prompted the medical schools across Pakistan to deliberate over their curriculum.

This study focuses on those medical schools of Pakistan where reforms have already been introduced successfully. Medical educationists are the middle leaders responsible to bring about change[5] and they are largely responsible for translating the vision of their higher-up and transform it into reality till the ground troops. They are the change agents who generate commitment and alignment to the vision and generate practices which make the change possible.

METHODOLOGY

A qualitative study was conducted across four institutions from Feb to Apr 2019. Sampling was purposive (homogenous) and carried out in stages. During first stage the medical colleges who had successfully adopted the integrated system in last 10 years were identified and the key persons involved in reforms were singled out. These individuals had a background in medical education.

Eighteen participants from 6 medical colleges were approached to participate. Fourteen Medical Educationists involved in curricular reforms of four different universities responded and were included in the study. Study setting was Riphah International University, Shifa International University, Fauji Foundation University, Islamabad, and Khyber Medical University, Peshawar.

In-depth interview of the participants was carried out. All audiotaped data was transcribed, and Data analysis was done using Atlas ti version 7.5.7.

RESULTS

Fourteen participants were interviewed, 6 males, and 6 females. All participants were more than 30 years of age, had a minimum of Master's Degree in Medical Education, and more than 10 years of teaching experience.

One-hundred-fifty-one (151) open codes were identified from all interviews during the first round. Later the codes were grouped into 21 subthemes and 5 themes. The themes were challenges, creating climate for change, implementation, evaluation and coping strategies used by educational leaders.

Multiple challenges were highlighted during the course of interviews which were grouped into seven subthemes. Resistance, student problems, changing of leadership, difficulties in designing the curriculum are some of the main problem encountered by the participants.

Initially when reforms were introduced students performed poorly in examinations.

'Their previous methods were Teacher-based system, i.e., the cramming-based system. So, when they reach here and are subjected to discussion and interaction, that is when they face difficulty in adopting this new system' (R6, M)

Resistance to change was one issue identified by all participants. Resistance was encountered mostly from the faculty who would also create negativity with the students.

'This was the same faculty who was agreeing with us on the front but would create negativity with the students.' (R1, F)

During implementation phase the faculty showed resistance in classes and would also convey their apprehensions to the students. This type of covert resistance was difficult to tackle. On the front of things the faculty was on your side.

Not being appreciated for your efforts and not being awarded any incentives for your efforts is another factor which lead to negativity.

'Biggest issue with me was that people don't appreciate what you're doing.' (R9, M)

Lack of planning and focusing on the details beforehand was another issue faced by the middle leaders. The colleges faced the problems as they came along which lead to unnecessary delays.

'It is unfortunate that in Pakistan there's an issue we work on ad hoc basis, we don't believe in full time work.' (R8, M).

Another technical issue the colleges faced was creating learning objectives and aligning the curriculum with the learning objectives. This was more challenging and required competent staff along with repeated sittings of the faculty members.

Infrastructure in medical schools was made for large group learning. After deciding on the curriculum and level of integration, changes were made in infrastructure according to available resources.

The challenges identified cannot be viewed as conclusive as they differ from institute to institute. But these challenges can be taken as guidelines to be kept in mind and addressed while designing curricular reforms.

Multiple strategies were adopted by the faculty in handling the reforms. These strategies have been categorized according to Kurt Lewin model for change. Strategies adopted in the three main phases for change namely unfreezing, institutionalizing the change and refreezing.

During the initial stage of reforms a platform for change was introduced. One institution initially conducted SWOT Analysis and started sensitizing their faculty for the reforms. Faculty development was started and a core team was identified to bring out the reforms.

'SWOT analyses was to be conducted on all the Faculty of this college & all the head of departments' (R1, F)

Faculty development and motivation also has a major part in creating a platform for change.

'70 percent is your planning, but you do need to modify things according to the situations. You need your people in depts... … because implementation at the level of departments is hard to ensure' (R10, F)

One strategy adopted by an institute for the preclinical years was deciding the percentage of basic sciences and clinical. They opted for a 70/30 rule with 70% for basic sciences and 30% for clinical. Then they held multidisciplinary meetings for modules. They tackled one module at a time and decided on the content, the instructional strategy, and assessments. This practice continued till the modules were in print. Secondly, they incorporated a pilot project before the actual process. A pilot study identifies the loopholes and they can be addressed beforehand. Once the curriculum runs it becomes very difficult to make further the changes.

'We had a skeleton implementation; it was chaotic and needed a lot of work.' (R7, F)

A clear road map for implementing reforms should be chalked our beforehand. Having the new curriculum for the complete five years on paper saves undue delays. After the curriculum design is finalized, the second step is altering the infrastructure of the medical school according to available resources.

During the 'Change' phase Faculty development and addressing the problems as they arise go hand in hand. One institute opted for running the completed modules alongside designing of the next modules. This step was not very wise as reflected by the participants as it was very difficult to complete the modules once the curriculum started running.

Professional development of the faculty is utmost important in educating the faculty. Participant highlighted that they have faculty development programs throughout the year. Having everyone involved in the forms creates an environment more favourable for change.

'The faculty who feels they can influence the direction of reforms, they are more likely to participate in the reforms.' (R7, F)

During the last 'Refreezing phase' the new curriculum is in place. At this point in time it has to be re-evaluated to identify the deficiencies and for incorporating the improvements.

One of the flaws in our system was we ran the faculty development plan parallel with the reforms. Faculty development should have been done before, so the faculty was well prepared for the reforms.

To address the minor resistance, first step taken was identification of the potential 'hidden

counterforces'. This was possible only in an environment where open communication is the trend and different views are welcomed. Having your people in different departments also helped to identify resistance. Once the people responsible for creating problems were identified, multiple strategies were adopted. Assigning them responsibility for a task took care of the minor resistance. Participants opted for harsher measures when the faculty refused to participate. Replacing those faculty members is the viable option but requires support from principals and deans. During the implementation or execution phase if this issue is not addressed timely all previous change endeavours fail.

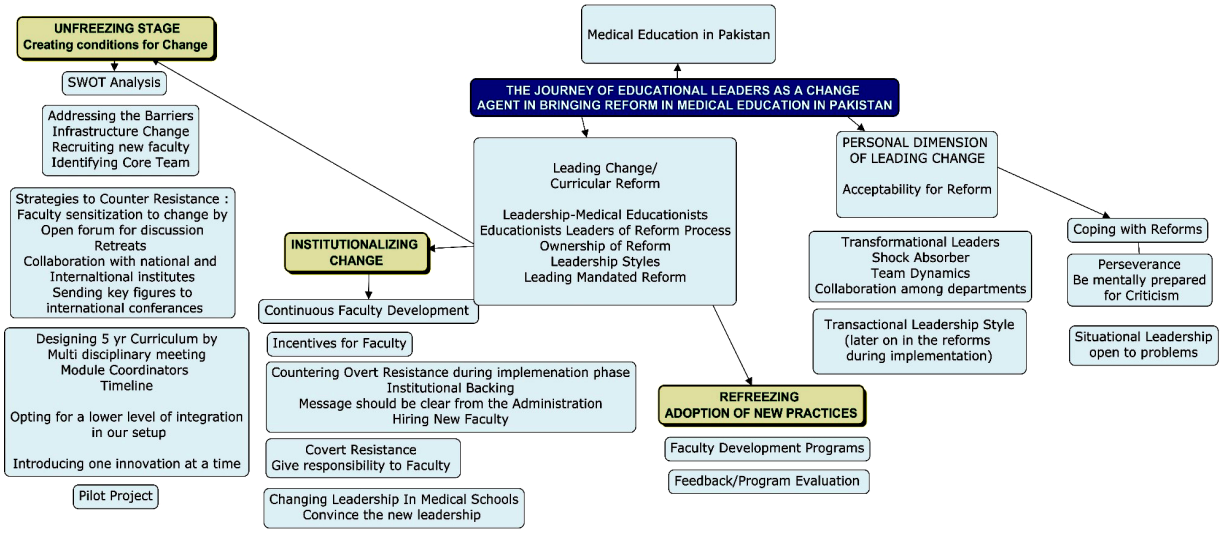

Figure-1: Summary of major events during the phases of Curriculum Change

DISCUSSION

Change is a complex multifaceted phenomena and literature is abundant in the strategies adopted in successful change process but having said that 70 percent of change initiatives are not successful. Leaders and managers adopt a number of strategies and are so engrossed with the recommendations and literature available that they lose their primary focus.[6]

Challenges faced by medical school top hierarchical leaders have been explored on multiple occasions and the need to explore the process from different stakeholders has been highlighted.[7,8] This study focuses on the middle leaders: Medical educationist who believed in the reforms and played a central role in materializing the vision, but the initiator of reforms was the top leaders. It builds on the work of Bland et al and Velthius to have an in-depth understanding how the medical schools across Pakistan were successful in curricular reforms. Bland et al has argued that literature is abundant in new curriculum introductions and their results but the process of how it is achieved needs to be further explored.[9]

The major challenges which this study came across were Resistance, unstable Governance, Politics and Lack of Acknowledgment.

Resistance has been an established challenge in reforms. Whenever people are pushed from their comfort zones it's a natural response to oppose. Fullan has argued that if teacher's vision and knowledge is increased they can have a very major role in implementation. Change is only superficial without their involvement.[10] Another strategy is eliminating the resisting faculty. One of the medical schools in the study adopted this harsher step but as a result, key faculty members resigned. It further lead to delay and rehiring had to be done. The best way forward as described by a participant is to guide and sensitize the faculty early on. With proper knowledge faculty is motivated to adapt into the new role.[11]

Participants in my study argued that tackling major change at a single point can be difficult but by introducing the in a stepwise fashion and addressing the problems that arise along the way is the best way forward. Initially faculty was in denial in the necessity of the reforms. Later with repeated sensitization they revised their views and became a strong support system, but for faculty who created negativity later on. Ultimately the faculty who was not willing to participate had to be replaced. To jump to this step strong administration is required and the Principals and Deans need to advocate for the changes. If the top leadership does not take drastic steps at this point all change endeavours fail. Marie Jippes from Maastricht conducted interviews of change agents in medical schools of Austria where successful reforms took place despite the national culture as an acknowledged barrier.

She concluded that faculty opposition can be countered if change is encouraged at national level.[12]

Medical educationists agreed that another issue they faced was designing the curriculum and steering the change process. The strategies adopted by these medical schools varied. One Medical school opted for the complete 5-year change in curriculum but the medical educationists agreed that the transition phase had been very rough and although the end was kept in mind it was a difficult change. Two medical schools took it one year at a time and introduced the innovative educational strategies in an incremental manner. This gave them the flexibility and time to adapt and also address the issues as they arose but respondents all agreed that curriculum document for all the five years should be made in advance as the medical schools who implemented and planned side by side faced problems after their academic years had already started.

Recurrent change in higher echelons is one of the hurdles which lead to instability in reforms. Every new leader would question the strategy of the predecessor and ultimately valuable resources are wasted. In addition the minor opposition which was under control previously, created problems.

Certain leadership characteristics essential to successful change were highlighted during the course of the study. Namely Perseverance, reflective practices and a shock Absorber.

The success of the reforms depends on how the educational leaders approach on different issues. In change literature two strategies have been discussed simultaneously 'Reflection' and 'Action Practice'. Reflective practices refer more to changing strategies as the circumstances evolve. Action practice is focused on to changing the mindset of people around to fit their purpose. Action approach is effective for simple change but for complex endeavours study leaders advocated to take a broader approach and honour the diversity of people included in the reform process.[9]

Involving multiple medical schools across Pakistan is strength to this study as this can now be applied to medical schools across Pakistan. Although the researcher has no background as a change agent she had an unbiased view while transcribing but having said that if that experience would have been present a better and relatable understanding of the process would have occurred.

Changing medical curriculum in Pakistan needs to be explored form various stakeholders especially the students. Their perspectives can be valuable in understanding and improving the curriculum.

CONCLUSION

Curriculum change in medical schools is a complex, expensive undertaking but it's more cumbersome and expensive if it fails. The purpose of conducting this research is to have insight into the curriculum change so future endeavours are successful. Middle leaders face multiple challenges during the process and adopted multiple strategies to overcome them. Their success stories can be used as a guideline for future curriculum change. The change leaders identified that regardless of the planning curriculum change is still a bumpy road. The leadership qualities which sustained the change process were perseverance and avoiding confrontations.

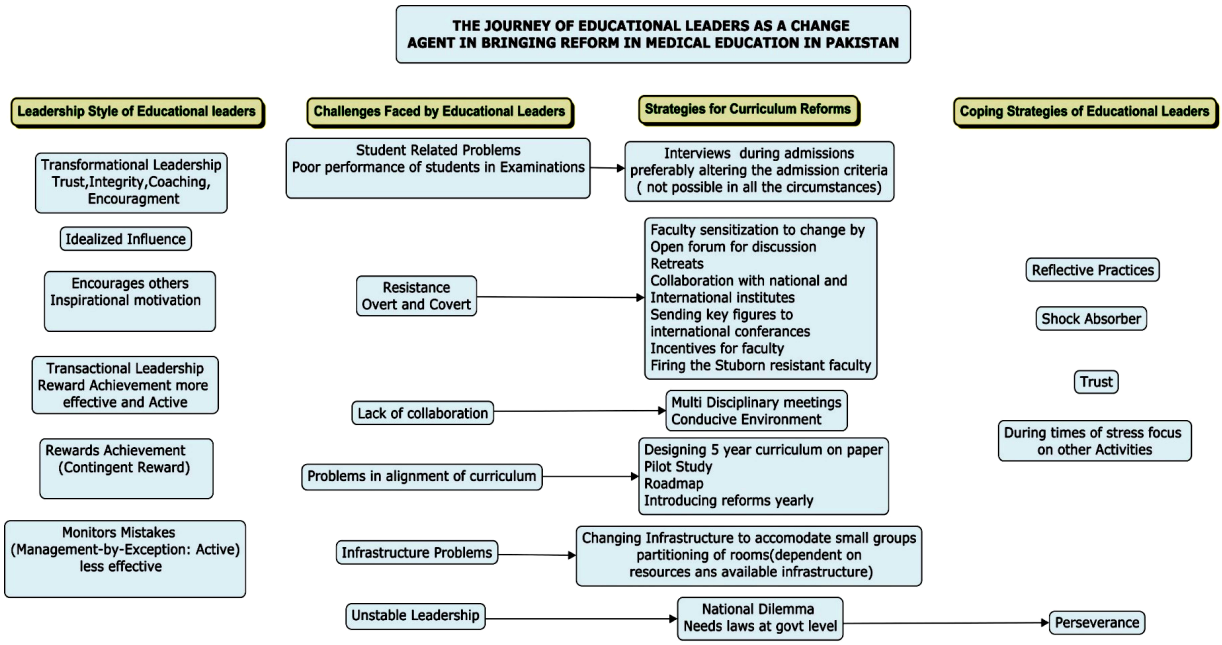

Figure-2: Challenges faced and strategies adopted by Educational Leaders during Curriculum Reforms

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