# Strategies for sustaining curricular changes in medical schools: a proctological view

Madawa Nilupathi Chandratilake<sup>1</sup>, Diantha Soemantr<sup>2</sup>

#### **Abstract**

Major changes were introduced to medical curricula globally over the last two decades. They were driven either by external pressure from governing bodies or self-reflective processes. Though much has been written about the planning, initiation and implementation of such changes, fewer experiences of the strategies to achieve sustainability have been shared in the medical literature despite their long and successful sustainability.

The necessity was identified and motivation was generated for medical curricular reforms in Sri Lanka by pioneering group of academics who reflected upon the existing process. Major changes have been sustained for more than a decade successfully. The Faculty of Medicine University of Indonesia in its short history of curricular reforms, in accordance to the government's proposals has adopted similar measures for their sustainability.

Though we involved in neither the change nor the sustainability processes in those countries thoroughly, we had the opportunity for upward observation. We attempted to compare the successful measures of sustainability in the two countries and correlate our conclusions with the experiences and recommendations published by others.

Leading the process cleverly, formulating a suitable management structure, decentralising the decision making power, managing resources effectively, collaborating with different parties in the institution, keeping balance between top-down and bottom-up approach, enhancing motivation of cohort, maintaining flexibility and adaptability throughout the process, establishing functioning system of on-going evaluation early, networking with external professional bodies, continuing training programme regularly and frequently, and sharing the ownership seem to be generically effective as strategies for sustainability of changes in medical curricula.

#### **Background**

Much has been written about planning, initiating and implementing changes in medical schools globally over the last two or three decades. Though many such changes have been sustained, fewer experiences of the strategies to achieve sustainability have been shared in the medical literature.

Major curriculum changes in medical schools in Sri Lanka started in 1990. They

academics. Despite the 'radical' nature of the changes, they have been sustained for more than a decade due to several successful measures. The Faculty of Medicine University of Indonesia was among the pioneers to introduce major curriculum reforms to its curriculum in 2005, in accordance to the proposals made by the Indonesian government. Though it is still in its early phase, measures adopted for sustainability seem similar to other institutions in the world.

Certain efficient measures have been deployed by medical schools simultaneously for their sustainability. The authors, as senior medical students, young medical graduates and subsequently as junior members of the medical academic staff, had the opportunity to observe and participate in the change processes and

<sup>&</sup>lt;sup>1</sup>Lecturer in Medical Education, Faculty of Medicine, University of Kelaniya, Sri Lanka

<sup>&</sup>lt;sup>2</sup>Lecturer in Medical Education, Faculty of Medicine, University of Indonesia, Indonesia were the product of an effective selfreflection process of a group of pioneering

their sustainability measures in one or more medical schools in these countries. After comparing the successful measures of sustainability in the two countries, our conclusions were correlated with the experiences and recommendations published by others. The following twelve generic strategies have shown to be effective for successful sustainability of changes in medical curricula.

#### 1. Leading the process is the key

The person who leads the process of sustaining the change may not necessarily be the holder of the vision. But he or she should be fully convinced about the change. This allows minimal room for opposing forces to consolidate at decision making levels, discouraging their attempts to revert the process.

It is important that the leader who initiated the change leads the process until the change is reasonably established. It may be a few months for a minor curriculum change or several years for a major curriculum reform. This issue bears particular importance as the evaluation of an initiative aimed at curricular innovations in medical education should be continued for a long enough periods beyond close of the initiative to measure the desired outcomes (Wartman et al., 2001).

The prospects for sustainability of the change seem high if the leadership is supported by the majority. It can be argued that the task-oriented leaders, who usually bring in the changes, are less supported than people-oriented leaders. However if the support is less, it can be bought in through financial incentives, foreign travel or personal favours. The effects of such strategies at the phase of change influence positively towards sustainability.

The subsequent leadership has crucial effects on the sustainability of the change. An inappropriate successor of a brilliant leader can either reverse the whole process or minimise its benefits. The staff members may be responsible for deciding the subsequent leadership. Providing ample opportunities for suitable and potential candidate/s to flourish in the process of change, attracting the attention of the majority is effective in such a context. In addition, inserting the members

of the 'pro-group' into key management positions which can influence the future leadership is wiser if it is decided by external bodies. Such strategic approaches are ethically justifiable as they are directed to achieve the benefits of the change for the majority.

### 2. Formulating a suitable management structure

Curricular management and institutional administration are intermingled in most traditional institutional settings. Strict rules and regulations may not always warrant great degrees of changes. However, inappropriateness of management structure can be detrimental to the sustainability of the change or innovation.

The decision to alter the management structure and its extent depend highly on the magnitude and complexity of change. It should be decided early and the decision should be implemented as early as possible. At times, total replacement of the existing management structure by a new approach may be necessary to implement the innovation successfully. Separate structures interacting with each other for curriculum management and institutional administration may be an alternative if such a comprehensive change is not feasible.

Proper communication at intra and inter committee level has a central role in sustainability. The importance of communication should be recognised and its source, clarity, sequence, mode, frequency, and level carefully considered (Wartman et al., 2001).

### 3. Decentralising the decision making power

Staff participation and ownership of change are important if new methods are to be successfully implemented (Jones et al, 2001). This notion is applicable to the implementation phase as decision making power generates a considerable amount of ownership and cohesiveness among the members. Many routine problems can be solved at individual or lower committee levels if they are empowered. Furthermore it reduces the delays and frustration related to a centralised process of decision Therefore it should making. decentralised as much as possible. Conflict should always be expected at

decision making forums. According to the dynamics of conflicts, appropriate interventions should be made in the initial phase of conflict during which the differences among the parties are minimal. Efforts for consensus are likely to fail in the middle phase during which the intensity of the differences are at their maximum. Settlement is likely to be achieved again in the late phase of the conflict.

#### 4. Managing resources effectively

The change should be carefully weighed against the available financial, physical and personnel resources at the time of change. Short term, but particularly long term budgeting is critical to sustaining reform (McLean, 2004). Frequently, overestimation of the available resource ends up with total collapse of the process at the halfway. Underestimation, on the other hand, limits the potential and scope of the change; hence its ultimate benefits to the institution.

Mostly, but not always changes are dependent on funding as it has the potential to generate physical and personnel resources. Funding brings with it power and attention (Wartman et al., 2001). In many cases, the frustration is driven by the marked decline in funds available to support the academic mission (Griner & Danoff, 2000). Usually special funds and grants utilised for changes are available only for a certain period of time. The institution should plan for the sustainability of the change within the capacity and capability of the institution in their absence. It is virtually impossible to secure additional funding once reform is in progress (McLean, 2004).

Acquisition of resources is not always an option especially for institutions which depend on limited central funding from the government. Though they have started up the change with external funds most of the time, the sustainability plans are focused upon the redistribution of existing resources. A process for altering the formula for distribution of institutional funds so that allotments are more clearly based on current teaching effort was initiated several years ago in the USA (Robins et al., 2000).

### 5. Collaborating with different parties in the institution

Students should be an integral part of all sustainability measures. Their participation can vary from one or two representatives in staff dominated committees to total student committees with regular interactions with staff committees which student parallel. Though run in participation is vital, magnitude of itself necessarily does not affect the sustainability positively.

The committees governing the change should comprise both senior and junior members of the staff. Opportunities for raising their voices and holding important responsibilities by the junior members are important sustainability strategies, as they enhance the sense of ownership of the change.

Most importantly the 'anti-change' opinion holders should not be regarded solely as a threat and thus avoided. They should be mixed with 'pro-change' opinion holders in committees maintaining a fine balance. Skills mix among the group members targets and deadlines enhance the functional efficiency (Belbin, 1993). This strategy minimises interruption or disruptions of process due to malfunctioning components of the management structure.

Wartman et al. (2001) also consider that an overarching organisation structure governed by committees with careful representation from the various constituencies is essential.

### 6. Keeping balance between top down and bottom up approach

The enthusiasm and excitement to bring about the change usually do not last long. The environment created by the change can produce different roles and additional workload, which may not be appreciated by every member of the staff. Therefore neither top-down nor do bottom-up approaches work alone in sustainability.

Though changes can be brought in with top-down strategies, internalisation of the change which is crucial for its maintenance needs bottom-up strategies. Disregard of the latter results in changing of 'change' by regime to regime. On the other hand

bottom-up approaches, which are renowned for better sustainability, need certain top-down approaches sooner or later for their smooth and effective functioning.

#### 7. Enhancing motivation of cohort

Hutchinson (2003) adapted Maslow's pyramid model (1954) for the hierarchy of needs and described ways and means of increasing motivation towards learning

using the pyramid (Figure 1). But the model also shows greater relevance in motivating individuals towards change, thus also the sustainability when considered with the dynamic nature of the group (Figure 2). Each layer of the pyramid reinforces and expedites the process of 'learning the change' extending across the 'early' and 'late' adaptors from 'early knowers'. Self-actualisation of the change by the majority is the key to its early internalisation and establishment.

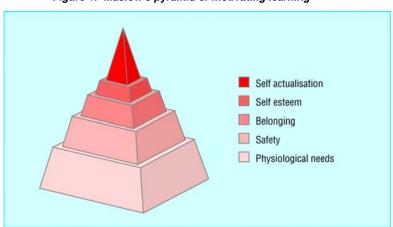
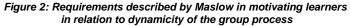
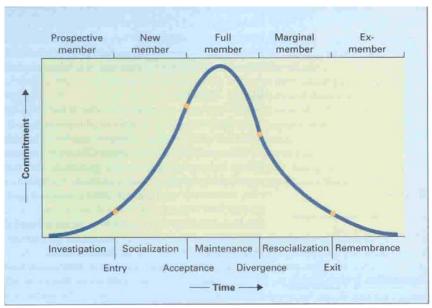


Figure 1: Maslow's pyramid of motivating learning





The perspective of members of the group who are in the investigation phase can be influenced to become new members by fulfilling their physical and physiological needs. The needs include educational and training opportunities, financial incentives,

career promotions, or other types of rewards as individuals or meeting rooms, IT facilities or supportive staff as groups.

The new members of the group who are in the socialisation phase should feel the

environment in the process as safe for creating the sense of belonging and enhancing self-esteem. The environment in the process should be safe for experimenting, voicing their concerns, identifying their knowledge gaps, and stretching their limits. The safety of the environment can be threatened obviously by humiliation, harassment, threat of forced disclosure of personal details, which should thus be avoided.

They should be respected members of committees in which their voices are heard and attended to. Useful roles should be allocated to them and their colleagues who share similar background, experience and goals, creating the sense of belonging of the change. It can take many positive moments to build self esteem, but just one unkind and thoughtless comment to destroy it (Hutchinson, 2003).

Positive self-esteem pushes new members in the socialisation phase further up. It can be built and enhanced by praising one's productive efforts, words of appreciation and constructive rather than destructive criticisms. Members with high self-esteem achieve the self-actualisation which is immensely valuable from the sustainability point of view.

As the group formation is dynamic, it is essential to pay due attention to these issues continuously to improve the sustainability.

## 8. Maintaining flexibility and adaptability throughout the process

A rigid changing process is less sustainable as change itself is dynamic in nature. The change should be seen as a journey but not as a blueprint. One can plan the group, duration, route and mode of reaching the town A. But unexpected reasons can alter the duration, route, mode and participants of the planned journey. Similarly the leadership and management should be prepared to participants. reconsider the schedules, the pace and methods on the way to achieving goals. However, the elements of flexibility and adaptability should still be within the appropriate corridors. Any adjustments or compromise made must be in concordance with the predetermined objectives and goals of the change. But in worse scenarios, the barriers may be strong enough to prevent the process of change from reaching the ultimate goals. The process should then be adaptable enough to accept penultimate goals as the ill effects of a total failure of an attempted change can take generations to reverse.

Comprehensive change may not be achievable all at once in certain institutional contexts. In such instances, a step wise and gradual approach may be a more feasible alternative. However, although the implementation is gradual, each step or stage should be significant enough to be noticeable and meaningful and thus, the momentum of change could be sustained.

### 9. Establishing functioning system of on-going evaluation early

The process of change should be staged with short and medium term goals together with its long term goals. The former keeps the enthusiasm and active engagement of the work force, while the latter provides them with the guidance. Incorporating the methods of evaluation at the planning stage of the changing process is vital for its effective materialisation. Designation of persons and identification of methods for an on-going evaluation should be done with appropriate timing and reporting system. In addition, the communication between different components described above should be smart enough to filter down the results to the parties concerned. They should be used to make immediate changes necessary to small but important problems, which can be detrimental to the sustainability of a change in long run.

### 10. Networking with external professional bodies

External driving force may initiate the change. But it has a paramount importance in its maintenance. Such forces include funding agencies and regulatory and/or accrediting bodies frequently. In addition, collaborations with other resourceful institutions are also helpful in obtaining regular inputs such as staff training and research. Networking with other institutions and professional bodies has repeatedly shown to be effective in sustainability.

### 11. Regularly and frequently continuing training programme

Both experience and evidence have shown that the staff development programmes play a key role in sustaining change especially in contexts of a high transition rate of staff members and gradual changes. They can be used to impart new knowledge and skills required by the change and/or supplement the gaps. But importantly, they should be carefully tailored and timed to meet the institutional needs identified by regular evaluations. Timely and targeted programmes have great effects in bringing about positive attitudinal change among staff members as they encourage reflection on their own practices.

#### 12. Sharing the ownership

'Blames' and problems should always be regarded as potential friends. 'Blames' are indications of change. Finding solutions to problems is acting upon sustainability. Though individuals should be praised and rewarded for their outstanding contributions towards the change to increase motivation and participation in the process, credits of the change should be shared collectively as a team in order to achieve sustainability. Changing agent/s alone should not seek all the credit as this gives a wrong impression to others, engendering resentment.

During the sustaining phase evaluations are not always positive. Responsibility for negative outcomes should be shared by all change agents showing their accountability towards the institution. This phenomenon becomes obvious when individuals perceive a high sense of ownership built in by leadership and management structures. Remedial measures and patch up work are spontaneous and immediate under such situations, and these are the essence of sustainability.

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