From Clinical Center to Academic Institution: An Example of How to Bring About Educational Change

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From Clinical Center to Academic Institution: An Example of How to Bring About Educational Change

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Abstract

Background: The usual scenario for change management in the medical education field is an academic institution creating a patient care facility. The opposite change is however rather rare and challenging. There is not much in the medical education literature on experiences of change management that provides sufficient support to readers who are involved in such process of change.

Methods: We analyzed the experience of a clinical institution that has changed into an academic one. The methods used were archival analysis and interviews with those involved. The raw data were analyzed using a framework derived from the change management literature.

Results: Despite the complex change and the use of a directive change strategy, the change managers’ strategic thinking and timely use of different change strategies have helped in eliminating the initial change difficulties. The directive change strategy was turned into an advantage that has facilitated quick implementation.

Conclusion: A directive change strategy is not always a disadvantageous method leading to chaos in the process of change. The educational change management experience gained by King Saud bin Abdulaziz University for Health Sciences can be considered a model for other clinical institutions changing into academic ones.

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Keywords: Change management; Change strategy; Academic institution; Clinical institution; Complexity theory

1. Introduction

Change management is a structured approach to shifting and changing individuals, teams, and organizations from a current state to a desired future state. It is an organizational process aimed at empowering employees to accept and embrace changes in their current business environment.1 Change management is a constant in the quickly changing world of organizations. It is a challenging and difficult task that requires involving the right persons, taking the right steps, and very careful planning to reach the desired goals of this change. Unfortunately, effective organizational changes are rare.2 The most recent statistics, derived from a global survey of businesses, reveal that only one-third of organizational change efforts were considered successful by their...
This failure is probably related to the inappropriate selection of a particular change strategy.

Several change strategies have been proposed for change management. However it was noted that once organization managers practice a certain strategy and experience that strategy is successful, they rarely change it. It appears that “strategic thinking” is not a core managerial competence widely available at most organizations. It appears further that executives hone their capabilities by tackling similar problems over and over again. Change management, hence, is not a task that they face repeatedly. Consequently, most managers do not develop competence in strategic thinking and more importantly in change management.

Expert opinions indicate that utilization of a range of strategies to tackle a change is preferred. In fact, part of the skill of effective change management in a health care setup is to recognize what strategy to employ and when, where, and how to use these strategies. This decision is usually based on certain issues such as health and safety, accessibility, resources, and cultural considerations.

Five different strategies were proposed to be implemented in case of change management. The strategy can be “directive” in which the manager uses his authority and imposes change with little or no involvement of other people. It can be also an “expert strategy” that usually involves content expertise to manage and solve technical problems that result from the change. The manager may also utilize a “negotiating strategy” to show his willingness to negotiate and bargain in order to effect change with timely adjustments and concessions. When managers plan to change peoples’ values and beliefs, they opt to implement an “educative strategy,” and, finally, when the senior manager stresses the full involvement of all of those involved and affected by the anticipated changes, he implements a “participative strategy”. As it appears from the description of these strategies, some are more technical and appear to be difficult to implement particularly in an educational environment. Overall, the choice of the implemented strategy is depending on the type of the task and its complexity.

To deal with the difficult task of successfully bringing about change, complexity theory may provide a road map. Stacey has proposed a matrix that consists of two dimensions with regards to management of organizational change; “certainty” and “agreement”. While “certainty” in any change management depends on the quality of the information base that facilitates individual and joint decisions, “agreement” represents the degree of understanding, cooperation and acceptance among the people directly involved in what should be done during the change implementation. The higher the agreement and certainty, the lower is the complexity and difficulty of the required task. Alternatively, the lower the agreement and certainty, the higher the complexity and difficulty of the task. In the extreme situation where both agreement and certainty are very low, we may end up in what is described as “chaos management” of the implemented change. Kotter assumes that what can make such a difficult change nevertheless successful is a stepwise holistic approach followed by the change managers.

Kotter has proposed an eight-step process to carry out a firm and successful change agenda; see the first two columns of Table 1. These eight steps are: (1) establishing a sense of urgency, (2) creating a guiding coalition, (3) developing a vision and strategy, (4) communicating the change vision, (5) empowering others, (6) creating short-term wins, (7) consolidating gains and producing even more change, and finally (8) institutionalizing the new approaches for the future. Change management that follows these steps is likely to be more organized with a higher chance of successful transformation for any organization.

In the medical education literature publications describing institutional change such as the change from clinical center to academic one or vice versa are rare. In real life, the usual change scenario is the transformation of an academic institution into a clinical one. In Saudi Arabia for example, Princess Nora bin Abdulrahman University has established King Abdullah University Hospital to support the training of their already established Medical College, and King Saud University has established King Khaled University Hospital to support the training of their health sciences students. However, it is quite rare and perhaps more challenging to find a case where a clinical institution changed into an academic one. There are some examples around within the Eastern Mediterranean region where the change process that is the topic of this article took place. The American University of Beirut started as a missionary hospital that transformed into a medical school in 1867. The College of Medicine at Cairo University was initially established as a military hospital. Subsequently it was moved to Kasr El Aini as a hospital and then as a Medical College in 1837. These change processes are however never described in the literature and there are no descriptions of the type of change management that would help readers who are in process of similar change.

The aim of the present work was twofold. The first was to describe the history of the particular clinical
Table 1
A summary of our findings using Kotter’s’ description of the steps involved in successful change management (CM). It also contains the problems as identified and the lessons learnt while being engaged in the process of change.

<table>
<thead>
<tr>
<th>General description of Kotter’s CM steps</th>
<th>Kotter’s eight steps for CM during the CM</th>
<th>Problem identified at KSAU-HS during the CM</th>
<th>Strategies utilized at KSAU-HS to solve the CM problem</th>
<th>Lessons learned during the CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating climate for a change</td>
<td>Increase urgency</td>
<td>An important gap between clinical and academic needs and priorities was identified due to initial use of directive change strategy.</td>
<td>Use of expert change strategy, coalition from clinical, academic and administrative leaders to define the responsibilities and develop strategies to achieve planned vision.</td>
<td>Despite the initial use of a directive change strategy that has resulted in complex change, the later use of participative strategy was successful enough to eliminate the directive strategy shortcomings leading to goal achievement.</td>
</tr>
<tr>
<td></td>
<td>Build the Guiding Team</td>
<td></td>
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<tr>
<td></td>
<td>Get the Vision Right</td>
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</tr>
<tr>
<td>Engaging and enabling the organization</td>
<td>Communicate for Buy-in</td>
<td>Lack of cooperation of main clinical stakeholders.</td>
<td>Hard work to use educative and negotiation change to orient and communicate with the clinical departments and consult with experts. Open access to the University’s higher administration.</td>
<td>CM is time and effort consuming that requires different strategies to achieve stakeholders cooperation and culture change.</td>
</tr>
<tr>
<td></td>
<td>Empowering Action</td>
<td>Clinical stakeholders were not perceiving the project vision and mission as their own. There was no feeling of ownership.</td>
<td>Distributing stimulating and challenging assignments on various stakeholders. University successes were communicated with the faculty, students and society.</td>
<td>Stakeholders sharing the responsibilities and wins will assist in easy CM. Announcing successes helps in gaining confidence and support changing culture.</td>
</tr>
<tr>
<td>Implementing and sustaining the change</td>
<td>Do Not Let Up</td>
<td>The transient resistance when occurred has created sense of despair between the leading stakeholders.</td>
<td>Continuous audit and quality assurance system aiming to gain more credibility, transparency, trustfulness and support.</td>
<td>Different CM use, continuous audit, involvement of stakeholders and active work to change culture were successful in improving perceptions and change process.</td>
</tr>
<tr>
<td></td>
<td>Make Change Stick</td>
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</tbody>
</table>
center and its transformation into a center for higher education and science. The second aim was to analyze this transformation process and how it was managed. In our analysis, we focused on the identification of factors that have influenced the change management, challenges, threats, and factors that have contributed to its success. Through this analysis we hope to illustrate for readers the process of change management of a clinical center into an academic institution. This analysis could serve as a guide for others intending to pursue similar change.

2. Methods

2.1. The institution studied

We will describe and analyze the change management that has occurred at King Saud Bin Abdulaziz University for Health Sciences (KSAU-HS), Riyadh, Saudi Arabia, to accommodate the change from a clinical institution that used to provide bedside clinical services, post-graduate training, and continuing health education such as workshops and conferences, into an academic institution. This academic institution was supposed to specialize in health sciences education dealing with undergraduate, graduate, and postgraduate medical and allied health subspecialties. In addition, attached to this institution would emerge a research center and it would engage in national and international continuing medical education activities.

2.2. Data collection and analysis

The data to be analyzed were collected (1) using the official publications of KSAU-HS, (2) analyzing self-evaluation (SE) documents prepared for an accreditation visit of representatives of the World Federation for Medical Education (WFME), and (3) collecting documents from the central administrative offices of the University. These included: all the documents concerned with the establishment of the University, rules and regulations implemented, including its source and justifications, approvals obtained to initiate the University, establishment of colleges and collaborations with international Universities, and the university’s mission and vision. In addition (4) the key leaders who have established the university were interviewed. These interviews were unstructured and notes were taken. Subsequently, a thematic analysis was performed, guided by Hersey’s five change management strategies (6), Stacey’s complexity theory (8), and Kotter’s eight steps of change management (9). All documents and interview notes were read line by line by the first author and major themes were coded.

3. Results and discussion

3.1. Description of the transformation process

King Abdullah Medical City-Riyadh (KAMC-R) was a clinical institution that was founded initially in 1982 under the services provided by the National Guard Health Affairs (NGHA) in Saudi Arabia. The NGHA has gradually gained a leading position among the healthcare providers in the Middle East through high-quality patient care, well-developed postgraduate residency and fellowship training programs, the organization of local and international scientific conferences, and advanced continuing education programs. In this 1000-beds tertiary-care center, patient care was delivered to the Saudi-Arabian National Guard employees and their dependents and other citizens with complicated medical problems who were referred to receive the required secondary and tertiary health care.

During its pre-university phase, the NGHA had hosted the deanship of postgraduate study and the College of Nursing (CON). With the establishment of the College of Medicine (COM) in 2004, the KAMC-R Academy for Health Sciences was announced in preparation for a transformation to a health sciences university. On April 25, 2005, the Custodian of the Two Holy Mosques, King Abdullah bin Abdulaziz, declared the establishment of KSAU-HS. A distinctive feature of KSAU-HS is that it is the first specialized university for health sciences in its region. The King Abdullah International Medical Research Center (KAIMRC) was also officially established in 2004 to serve the NGHA and the KSAU-HS scientific and education research activities. The university received approval for a budget and received the land needed for its campus adjacent to KAMC-R. This has made the two institutions (clinical and academic) share the same geographical location. In addition to the main campus in Riyadh, the university has established two branches in close proximity to NGHA medical cities, one in Jeddah in the Western Region and one in Al Ahsa in the Eastern Region of Saudi Arabia. As a result of this major transformation, NGHA has components of a leading healthcare system in the region. It provides patient care through NGHA medical cities, education through KSAU-HS campuses, and research through KAIMRCs. KSAU-HS follows the rules and regulations of the Council of Higher Education and Universities of the
country. The KSAU-HS university council is chaired by the Minister of Higher Education in the Kingdom.

Several Master degrees are offered by the University. Out of these are Master Degrees in Health System and Quality Management, Epidemiology, Public Health, Health Informatics and in Medical Education. The university also offers 22 residency training programs that cover all major medical specialties and 35 medical sub-specialty fellowship training programs.

The top administrative leadership of the university is shared with NGHA, as the Chief Executive Officer (CEO) of NGHA is the President of the University. This joint leadership has facilitated the change management process since its early stage through unified top leader views, values and priorities.

Intensive work to select suitable curricula for the colleges to be established was initiated. A group of experts visited, studied and assessed the suitability of various key international college curricula across the world and finalized the COM curriculum from Sydney Medical School, Australia, the dental curriculum from University of Maryland, USA, College of Pharmacy curriculum from Tennessee University, USA, while Applied Medical Science College curricula were selected from different universities across the world and were aimed to serve the needs of the community such as emergency medical services from Flinders University, Australia, clinical laboratory sciences from the University of Arkansas, USA, respiratory therapy from South Alabama University, USA, and others.

Strong effort was put into turning the entire university campus into a smart campus. The KSAU-HS has established an information technology (IT) facility that aims to provide innovative resources for the purpose of continuously enhancing campus life through information and computing. The IT services have aimed to provide the latest technology enhancing the overall educational process such as the KSAU-HS Blackboard system and the university-wide student information system (SIS). These strong facilities have greatly assisted in fostering the support and development of the institution.

In the early days of the university, most of its faculty were the NGHA employees who worked jointly with the university. Throughout the university establishment and development process, active work was done to attract and employ suitable administrative and academic staff but the university continued to be highly dependent on KAMCR employees.

The university has adopted an active faculty development program to facilitate adopting the change required. Many faculties were sent abroad to internationally recognized centers in medical education for courses, master degrees, or PhDs in medical education. A local faculty development program was also planned and conducted systematically based on the needs and priorities aiming to enhance the level of all potential teachers up to the required standard and enlarge the available pool of trained academic teachers.

The university has also initiated a process of self-evaluation (SE) and has invited experts to perform a mock accreditation process. Subsequently, the university has contacted the World Federation for Medical Education (WFME) to assess the suitability of its COM in passing the accreditation process. The WFME team stated that the SE report was very helpful and gave a good impression of the college and its medical curriculum. The WFME final report concluded that compared to most medical schools, the COM as well as the KSAU-HS more generally are clearly in an enviable resource situation with the possibility of obtaining adequate financial support for necessary facilities and staff. They have identified major strength of the college particularly the program emphasis on clinical training, the close relation between the curriculum and the health care system, its research orientation and the realistic coherent organization structure. The WFME has accredited the COM on its site visit to the college in April 2009.

3.2. The process of change management

Table 1 contains a summary of our findings using Kotter’s description of the steps involved in successful change management. It also contains the problems as identified and the lessons learnt while being engaged in the process of change.

Reflecting on the change management strategies, the KSAU-HS had to adopt initially a directive strategy with the involvement of a very limited number of already employed personnel in the organization. This occurred following the Royal decree to establish this university and get it into function within a few months of the given orders. This type of strategy is known to be accompanied with a recognized short implementation time and high resistance from the stakeholders affected by the change. In fact, such strategy does not give the stakeholders enough time to understand and accommodate the change needs and more importantly does not provide the required time to change the surrounding culture.

However, though a directive strategy was implemented in the initial phase of the change, several other strategies were utilized later to accommodate further change requirements. For example, an “expert strategy” was used by the university information technology department and other related administrative agents.
to manage online curriculum technical issues. A “negotiating strategy” was used when the change managers negotiated with the different clinical departments to timely adjust the involved clinicians’ assignments aiming to accommodate their new academic tasks. A serious education effort or “educative strategy” was implemented aiming to: 1) describe the change aims and process to the clinical departments, 2) enrich the involved stakeholders with the needed knowledge and skills, 3) change gradually the stakeholders’ values and beliefs aiming to achieve a shift in understanding and a desirable change in the institutional culture.\(^{12,13}\)

In this case, the aim of the cultural change was to shift the institutional values and beliefs from accommodating a purely clinical practice into accommodating and accepting a mixed clinical and academic practice with strong enforcement on research, publication and teaching without affecting patients’ care standards.

During a later phase of the change process and after the stabilization of the difficult first phase at which the change managers’ main aim was to design the change management and establish its rules and regulations, senior managers started to stress the full involvement of a wider range of stakeholders who are affected by the change implementation. Therefore, a “participative strategy” was implemented.\(^{11}\) Though this participation was during a later phase but it helped significantly in reducing the resistance effect of the directive strategy that was used initially. Overall, the timely strategic use of multiple change strategies during the KSAU-HS change management to shift from clinical to academic institution was one of the main factors behind its successful change.\(^{3,5}\)

Despite this complexity and the transient resistance, the change management at the KSAU-HS can be described by Kotter’s eight steps for change management.\(^9\) There was a clear effort to create a sense of urgency for the change to be implemented and to identify the gap between the “strengths and opportunities” and “challenges and limitations” of the change. An important gap between the clinical and the academic needs and priorities was noted. The identification of this gap and the presence of a contradicting power between the driving and restraining force during the change implementation promoted a tendency to create the guiding coalition from clinical, academic and administrative leaders to work hard and sort these difficulties out, define the responsibilities, and develop strategies for achieving vision.

### 3.3. Challenges and its management

Clearly, the most challenging obstacle was communicating the university vision to the stakeholders.\(^{14}\) The working change managers as well as the selected core working group used every vehicle possible to constantly communicate the vision and strategy of the university to the stakeholders. They acted as a guiding coalition role model of the behavior expected from the organization’s employees, worked hard in orienting and communicating with the clinical departments and in consulting with national and international experts seeking opinions and guidance to correctly direct the cultural change. The gradually expanded working group has acted on empowering a broad-based action to get rid of obstacles and sort any conflict between the two major functioning systems; the existing clinical administration and the established academic administration. The working group worked on distributing challenging and stimulating assignments on various stakeholders; sharing in the educational activities, becoming an active member in the university committees, helping in auditing the current system, etc. Open access to the University’s higher administration was provided to all employees and a continuous audit and quality assurance system was established aiming to gain more credibility, transparency and trustfulness.

As an extra effort to change culture and positively promote the university vision, the university worked on generating short and long term successes. These successes were communicated with the faculty, students and society to gain more confidence and support. For example, across many achievements, the COM graduates have accomplished their Saudi License Exam, which is a National level graduate exam, and have achieved the highest average score amongst all the Saudi Medical graduates from different Saudi Medical schools for the past three consecutive years. KSAU-HS students and graduates have also participated in many national and international scientific conferences and have won several awards in these events. The entire Applied Medical Science College’s first batch of graduates received job offers even before graduating, which reflects the reputation the university and its different colleges have achieved locally. Moreover, the College of Nursing graduates’ employment rate has been approximately 100% since its establishment in 2002.

### 4. General discussion

As a result of our analysis to the collected data on KSAU-HS, we recognize that the most important resource, which had a positive influence and was a major drive in facilitating the change management was the people.\(^{13,15,16}\) People from the society, government,
leadership and many interested stakeholders who had a significant contribution to the change success.

We realized that there was a pressure from the government and the society to increase the number of highly qualified Saudi medical school graduates who will eventually take over the health care services in the Kingdom. At the time of the analysis, the Saudi national physicians represented only 20% of all working physicians in the Kingdom. If the current annual graduates number persists, for the health care in Saudi Arabia to be independent of expatriates, a period of decades or more is required. Hence, in order to expedite this process, KSAU-HS was established and provided with the needed resources (budget, land, technical support and others). KSAU-HS has depended greatly on the reputation of NGHA and on the reputable, well-established residency and subspecialty fellowship programs. This reputability has attracted and facilitated the hiring of qualified physicians and educators to participate. KSAU-HS has also relied on the senior administrators of KAMC-R who had extended experience in terms of project management and change management. Our analysis has indicated that these experts helped in the initial stages of planning the change management, shared their experience with the medical educators, planned resource allocation and set the policy for university management. The higher management at KAMC-R, in their plans for the change management, has depended on its reputable and interested physicians with strong medical backgrounds and often, even academic background. Therefore the strong clinical background of the institution and the presence of qualified leaders were very important aspects of the change success.

In our analysis we noted that there was a unique emphasis on developing the leadership skills of the institution physicians with a clear understanding of the KSAU-HS higher administration helping individuals in developing the knowledge, skills, and values that are required for the success. In return, these trained and enthusiastic physicians have created the core of the university management leadership.

We noted that the higher administrators, university leaders and health educators have worked on setting the criteria which determine priorities and decisions in terms of change management in order to develop the university values. Most importantly they worked on establishing high ethical standards and professionalism between the involved physicians by providing access to ethics education and resources to all faculty and administrators. This practice originated from the belief that managers and staff should adapt cooperative roles aiming to foster quality patient care and to meet future challenges, while maintaining high quality faculty performance, health education and culture sensitive services.

We have identified that KSAU-HS has enhanced leadership skills and individual responsibility amongst its faculty and staff. This was done in an interdisciplinary teamwork atmosphere through encouraging the development of new activities and ideas in biomedical and educational research. To further enhance the research, KAIMRC has worked on promoting basic science and clinical research between both the KSAU-HS and KAMC staff.

5. Conclusion

Short and long term successful change management utilizing a directive change strategy is possible. The initial use of a directive change strategy in the change management of the clinical center resulted in complex change and created some degree of uncertainty between the involved stakeholders. However, this strategy has facilitated fast change implementation that could not have happened if another strategy was implemented in the initial phase. The change managers’ strategic thinking and their subsequent timely and selected use of several other change strategies have helped in eliminating the initial difficulties.

Emphasis on developing leadership skills, culture-sensitive university values and vision, and serious educational and faculty enhancement programs are necessary to orient the various stakeholders on the implemented change and enhance the required cultural shift. Moreover, communicating short and long term wins to various stakeholders is a major factor contributing to the success of educational change management. These acts at KSAU-HS have resulted in a change management approach that has successfully shifted a clinical center into an academic institution.

References


