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A suggested strategy to decrease mortality of COVID-19 among healthcare providers/workers using the Kotter's Change Model

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Abstract

While millions of people stay home due to the lockdown to limit the spread of the COVID-19, the so-called White Army (doctors) and all health care workers around the world are waging a fierce battle against this deadly virus, putting their lives at risk. Despite the procedures taken in Syria to limit the spread of the virus, the losses among doctors are steadily increasing. A critical assessment of the doctors' situation in the health system in Syria and the procedures adopted in hospitals to prevent the COVID-19 infections will be presented. In addition, proposed procedures that can be applied in health system at individual, organizational and group levels have been suggested to reduce the number of deaths among doctors. Results revealed that according to Kotter's model of institutional change, a strategic planning has been developed and will be presented in line with the third goal of the UN sustainable development. In conclusion, the suggested strategy can be implemented in order to save the lives of doctors during the COVID-pandemic. It will help to achieve the third goal of the United nation and ensure healthy lives and promote well-being for all at all ages.

Keywords: Suggested strategy, Decrease mortality, COVID-19, Healthcare providers/workers, Kotter's Change Model.

Introduction

Commencing from a group of pneumonia patients in Wuhan-China in 2019, COVID-19 has rapidly spread into a global pandemic drawing attention to its ramifications [1]. COVID-19 is a highly transmittable and pathogenic viral infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which caused a global pandemic that led to dramatic losses in lives worldwide [2]. Due to the urgency imposed by this crisis, healthcare workers (HCWs) all over the world were responding to the enormous number of cases, facing the risk of infection, and making serious decisions under physical and psychological pressure [3]. Health workers are at higher risk of getting SARS-CoV-2 due to indirect contact with contaminated surfaces and objects or due to direct contact with infected person without adequate personal protection, through aerosol-generating procedures, or working with infected people indoors or in crowded places with inadequate ventilation [4]. The risk of occupational exposure increases with the level of community transmission of SARS-CoV-2 [5]. A publication in May 2020 by the International Council of Nurses indicated that more than 90,000 healthcare workers around the world were infected with COVID-19, of which 260 nurses had died [6]. Accordingly, a recent publication identified about 52 essential competencies required for approaching patients with COVID-19 [7].

Considering the emergent number of cases associated with the third wave of COVID-19, concerns have been raised regarding the increased mortality of health workers. Until the time of writing this article, more than 180 Syrian health workers have died, with no formal report estimating the exact number. The mortality of these HCWs has dramatically affected unstable health care system drained by the long war and difficult economic conditions. HCWs are facing challenges because of this pandemic, represented by not only shortage in

personal protective equipment (PPE), rest, rotation, training, but also losing lives [8].

Kotter's model has been broadly used in business [9], and also has been applied in healthcare as a clear and easily applicable change model that can enable delivery of optimal and safe health care [10]. It is simple, clear, straightforward and easily-applicable framework [10, 11].

Therefore, a suggested strategy that aims to decrease mortality rate among healthcare professionals caused by COVID-19, should be suggested. In this paper, Kotter's change model is proposed to be implemented by healthcare authorities, aiming to reduce mortality among HCWs.

The target of change:

The suggested strategy aims to decrease mortality rate caused by COVID-19 among healthcare professionals, save lives, and deal with COVD-19 pandemic.

Building-up a strategy:

Specific actions should be undertaken at 3 levels; individual, group, and organizational levels, in the health sector in Syria to decrease the number of deaths cases among HCWs caused by COVID-19. This can be achieved through being able to answer two questions, namely, "Where are we now?", and "where do we want to be?"

Where are we now?

The WHO classified the situation in Syria as level 4; indicates a very high risk[12]. Therefore, serious actions must be taken and a further active framework should be implemented to overcome this crippling pandemic.

We need a strategy to be put based on critical analysis, and far from the misleading reports to accommodate and contain the pandemic.

In March 22nd, 2020 the Syrian government declared the first case of Covid-19 in the country [13]. Previously, the government had established ''Covid-19 response team'' to oversee the national preparedness and readiness. The team had adopted plenty of procedures and applied WHO measures and recommendations, also, a lockdown was imposed and a successful media campaign was implemented to raise awareness among the Syrian communities.

In December 2020, new cases registered were thousand cases[15].

In March 2021, the third wave of the Covid-19 pandemic took place. It was catastrophic and overwhelming; there was no empty place in any of the intensive care units in the concerned hospitals neither private ones.

Health authorities in the Capital had to transfer patients to other cities like Rif Dimashq and Homs.

The CARDIAC SURGERY CENTER was turned to receive only Covid-19 cases, and patients with heart conditions were moved to another center.

The Police hospital in Damascus DC was put under the service of the ministry of health [16].

From 3 January 2020 to 21 April 2021 there have been 20,118 confirmed cases of COVID-19 with 1,368 deaths reported to WHO in SYRIA [17], and those numbers have only gone up.

The number of infected individuals might be less than the real one since the official cases are not registered unless PCR test result verifies the case. Further, a massive shortage of the kits for PCR tests in Syria, and the low possibility of detecting mild cases and asymptomatic patients resulted in limited detected cases [18].

“Health care workers are the backbone of the country as Covid-19 cases rage across the country the death cases among doctors due to corona was 180” according to the Syrian Doctors' Syndicate, which is considered a huge increase.

Collaborations were made with friend countries in order to secure the country with ventilators and PCR test kits. Additionally, the Ministry signed the COVAX convention to import COVID-19 vaccines [19]. However, recently, the first batch has arrived.

The World Health Organization (WHO) has published guidance on Covid-19 includes the rights, roles, and responsibilities of healthcare workers [5]. Leaders and managers should provide workers with personal protective equipment, and infection prevention tools in sufficient

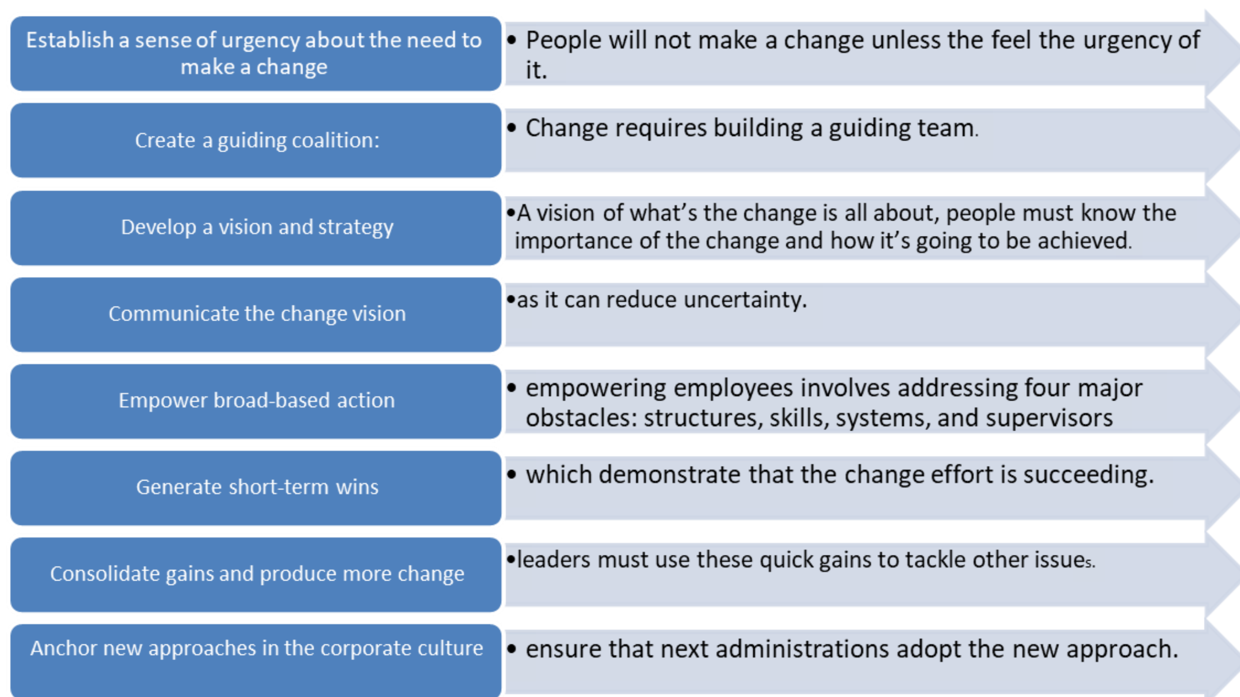
All over the country, medical personnel are holding periodically meetings to prepare for the increased number of patients. Undoubtedly, there are concerns of uncontrolled outbreak, in particular, due to the length of hospitalization period of the critical cases [20].

The deterioration of the pharmaceutical Industry during the 10-years war is attributed to several reasons, but one of the most important is the economic sanctions. These sanctions affected health sector in Syria negatively. Although it has not been imposed on the health sector directly, the health system has been immensely influenced. For instance, many foreign medical and pharmaceutical companies avoided dealing with Syria, simply, because they are apprehensive about getting any troubles with certain countries. In addition,

Importing Personal Protective Equipment PPE is very difficult due to the economic restrictions, which makes it challenging to provide proper healthcare and protection for HCWs.
All factors mentioned above, threatens the health and wellbeing of the Syrian health workers.
Doctors working in public and governmental hospitals are either specialists or residents. Residents play a major role in the current crisis, while senior doctors were kept away from ambulatory sections except for emergencies because they are more likely to get infected.
In Al-Hilal Hospital, there are 103 doctors; pulmonologists, general GP actioners, and 30 residents, in addition to10 nurses, and X-ray and laboratory technicians.
In Ibn Al-Nafees Hospital, 350 specialists and residents are dealing with 30-40 suspected patients daily [21].
Medical staff in Syrian hospitals are fully aware of preventive procedures [22].
As long as it is impossible to stop the contact between doctors and patients or potential carriers, providing doctors with safety and protection equipment is a necessity. Doctors are exposed to high viral loads specially those working in hospitals, therefore, they are at higher risk whether in being infected, or in transmitting the virus to others [23].
The world health organization WHO gave HCWs the right to remove themselves from situations that threaten their lives [5], but Syrian doctors continue to do their duties despite the current circumstances.

How to achieve this? Suggested Change procedures:
This following table presents the change procedures on three levels and the matching indicators which are considered as evidence of change.

Kotter model literature review
Using Kotter's framework for leading change allows program leaders to effectively implement changes required for promoting health. Kotter's strategy [16][17][19] [26] can be illustrated in the following diagram:



Kotter's model in Syrian Health Organization: [20][11][21][24]
Workers in the health sectors in general, and doctors in particular feel a great threat to their lives since the start of the pandemic in 2020. This feeling could be enhanced by making a short presentation mention the names and successes of some famous doctors who were infected with COVID-19 while performing their work and died. Nevertheless, health workers would not be sure that change is the answer. Therefore, lectures could be given about the procedures this strategy seeks to implement, and the objectives expected from it. Holding meetings with doctors in coordination with 'Doctors Syndicate' and 'Health Workers Union' will contribute greatly to creating the need for change, and to overcome

resistance. The proposed procedures for the change must be explained to doctors and other staff. This step would give them a sense of security. Top-down approach could make change remarkable in short time. Therefore, we should work simultaneously to create a sense of urgency among administrators and decision-makers. Decision-makers could be contacted and urged to respond to this change in formal and informal ways. They would see that it is the only solution to what doctors are suffering under the era of Covid-19.

This change is material and moral change, the leadership team shouldn't only include the general administration only, but also the executive management for change to be real. A team could consist of eight to ten people who are in charge, and believe in the need for change. The directors of (the hospitals' control departments) in the (Ministry of Health) and the (Ministry of Higher Education), the head of the (Doctors Syndicate), the captain of (health workers syndicate), a specialist in the management of change, directors of major university hospitals in Syria such as al-Assad and the AL-Mouwasat University Hospital, directors of famous hospitals of the Ministry of Health such as Al-Moujtahid Hospital, and the directors of some large private hospitals such as AL-Shami Hospital And Umayyad hospital could be contacted and invited to be 'change agents'.

The vision will aim for a healthier society by ensuring protection for workers in the health sector and preserving their lives. The strategy would be presented to the guiding team and there would be a critical analysis of it, changing for impracticable procedures, and explanation of foggy procedures.

(Gupta) suggested (2011) several ways to communicate a vision, such as storyboards, pocket cards, bulletin boards, emails, posters, signs, or town hall meetings [23]. Nowadays, in the era of technology and social media, the vision could be easily communicated and clarified using social media campaigns such as Facebook with emotional titles such as (Save the White Army) or (Doctor lives matter). The campaign could be supported with photos of the doctors who sacrificed their lives while serving COVID-19 patients. It would be engaging for customers, employees, humanity, society, and community.

Then, we could begin implementing the procedures (Table.1) and removing barriers. The first obstacle might be the lack of sponsorship for that reason, the guiding team should always communicate with the health professionals and doctors periodically and have continuous activities. The enthusiasm from sponsors would give importance to change and push employees to achieve success.

Lack of resources may be another obstacle for change. The change process may not receive sufficient financial support as it is not a priority, in this case, the team leading change should emphasize that the cost of avoiding change is higher than the cost of change itself; replacing medical staff, treating the injuries, or defects in the organization result in heavy costs compared to the proposed change.

Resistance to change can occur especially from those who are directly affected by the change. Supporting change is an essential step in any successful change management initiative. This starts by providing the "why" of the change including both the business reasons and the “what’s in it for me?” for each employee.

Opening special wards for doctors with COVID-19 infection would be a short success story linked to our vision.

The new procedures should be preserved in hospitals and their validity should be ensured. Evidence that the procedures were carried correctly (see the table), data collection of different hospitals and analyze them periodically (every month) by the guiding team would sustain acceleration. They should give feedback, correct errors, identify the defect and its causes, and suggest solutions.

This change will be the beginning, and not the end. This strategy would protect the life of medical professionals from infection with various respiratory diseases. It could be the start of other similar strategies that could protect medical personnel from different similar dangers such as bullying.

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