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Review Article

Lessons Learned from the COVID-19 Pandemic: Physician Safety and Coverage in Lebanon

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ABSTRACT

Similar to other countries, Lebanon experienced the challenges that the COVID-19 pandemic imposed on its healthcare system. Physicians, among other healthcare workers, felt the large toll of the pandemic. The growing number of physicians infected with the coronavirus has uncovered gaps in the policies and laws meant to protect and ensure physician safety. These include gaps in physician coverage for healthcare, disability, and death, in addition to particular vulnerabilities of trainee physicians, along with the absence of specific laws, strategies, and agencies to ensure the safety of the healthcare work environment. This paper highlights these gaps and proposes solutions to address them.

Keywords: COVID-19; disease outbreaks; physicians; safety

INTRODUCTION

The outbreak of the novel coronavirus has challenged healthcare systems worldwide. Since February 8th, 2021 cases have been documented in 219 countries.[1] Lebanon documented its first case on 21 February 2020.[2] With airport closure and a series of lockdowns, Lebanon was able to keep the number of daily new cases and hospitalizations relatively under control. However, the 4 August 2020 explosion at the Beirut port coupled with relaxed restrictions in October and December saw a massive soar in cases reaching 4,594 new daily cases in mid-January 2021.[3] What is more concerning is the increase in the number of hospitalizations where ICU occupancy in the whole country has approached 95% in January 2021.[4] With the meteoric rise in the number of infections and hospitalizations, concerns arose regarding the vulnerability and safety of healthcare workers, whose own infection rates also increased with many of them forced into quarantine, hospitalized, or dead because of the virus. It is needless to say that healthcare workers were at a higher risk than the general population, and can amplify outbreaks in healthcare centers when infected.[5]

A healthcare worker is one who delivers care and services to the sick, either directly such as doctors and nurses, or indirectly such as helpers, laboratory technicians, or medical waste handlers. In addition, healthcare workers include dentists, physiotherapy personnel, students and trainees, dietary and food services staff, administrative staff and others.[6, 7]

In this paper, we describe the toll of the COVID-19 crisis on healthcare workers in Lebanon, particularly physicians, without discounting the crucial role of other healthcare workers. Some of the discussed points can apply to all healthcare workers, however physicians are unique in many aspects regarding their protection and coverage. The sad experience with physician hospitalization and mortality due to COVID-19 has highlighted the need to revisit laws, policies and decrees related to health insurance coverage, and disability and mortality compensation

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for physicians, including those in training. This paper also presents recommendations on how best to address the gaps in insurance coverage during the pandemic, particularly for the most vulnerable among physicians.

COVID-19 Among Healthcare Workers

The number of infections among healthcare workers has increased by more than 50% during the month of September 2020[2] then steadily increased to reach a total of 2,429 cases by the beginning of February 2021.[8] After vaccinating the healthcare workforce, the number of new infections among healthcare workers fluctuated between numbers of less than 5 infections per day making the cumulative number of infections among healthcare workers to be 2,661 infections as of April 2, 2021.[8] Ideally, we would compare this number to the total number of healthcare workers, obtain the number of physicians infected and compare it to the total number of physicians actively practicing in Lebanon in order to get a better indicator of how much the workforce combatting the coronavirus is affected. However, these numbers are difficult to accurately ascertain as many physicians may be registered as active members of the Lebanese Order of Physicians (LOP) and are not currently practicing in Lebanon. Despite this issue, the LOP estimates this number to be around 8000 physicians.[9] An estimate from a large medical center in Beirut shows that 26% of the hospital staff have been infected with the coronavirus as of late January.[10] By the end of March 2021, 38 physicians have died due to the coronavirus.[11] The head of the LOP sounded the alarm at the increasing number of coronavirus infections among medical personnel and called upon insurance agencies and providers to cover 100% of the hospital bills for hospitalized physicians, and upon hospitals to ensure protective measures are taken.[12] It is worth mentioning the heavy toll that the pandemic exacted on healthcare workers' mental health, as a recent study showed that half of the participants were at high risk of acute stress.[13]

Regarding physician protection, it has been shown that the adequacy of personal protective equipment (PPE) and the clinical setting have a role in determining the risk of healthcare worker infection.[14] Globally, there was a shortage of PPE available along with an increase in prices.[15] Lebanon depends entirely on imports for its supply of N95 masks and ventilators,[16] making it difficult to ensure adequate supply from an already-strained global market. Furthermore, since Lebanon was already suffering from a financial crisis and imports had to be made in a foreign currency, PPE and medical supplies were at 8 times the old exchange rate.

The central bank tried to remedy the issue by supplying 85% of the required foreign currency at the old low exchange rate. However, many suppliers still put cash restraints on hospitals for the delivery of medical supplies.[17] This led to a shortage of PPE at the beginning of the pandemic, which prompted the head of the LOP to urge hospitals to provide doctors with protective equipment to help stop the spread of the virus among medical teams.[18]

Rights and Duties

Physician Healthcare Coverage and Compensation for Death and Disability.

Practicing medicine is a free profession, physicians thus are not employees and their relationship with the hospital they practice at is dictated by the contract each doctor signs. Physicians also do hold private practices and thus have no contractual relationship to any hospital. By law, a physician should be registered with the LOP to practice medicine.[19] Through the LOP a physician can buy a health insurance policy with a group priced premium. They can also enroll in the healthcare fund of National Social Security Fund (NSSF) which would further reduce their premium. The LOP, since 2004, has been covering co-pays required by insurance policies or the NSSF.[20] On the other hand, should a physician whose a member of the LOP, become temporarily disabled or kept out of work for a long time due to COVID, the order pays up to LBP 1,200,000 (equivalent to USD 150 at the market rate at the time) per month in disability coverage.[9] In cases where physicians passed away after contracting the coronavirus, the LOP has to pay their families a sum of LBP 50 million.[9] Recently, joint committees in the Lebanese parliament proposed a law that would consider healthcare workers who passed away due to contracting the coronavirus as martyrs; this would make their families entitled for more compensation.[21]

Another category of physicians includes trainee physicians. Trainee physicians are those who have obtained their medical degrees and are pursuing

further specialty training. They sign a contract with a teaching hospital and receive their training and a regular salary from that hospital. Many trainee physicians do not register with the LOP due to their inability to pay the registration and annual fees. Although by law, only those who register with the LOP can practice medicine,[19] trainees exceptionally practice under the license of their supervising physicians, who are held legally liable for any errors. While supervising physicians are held legally liable for medical errors and malpractice, they are not responsible for the trainee physician's healthcare and safety coverage as the trainee's contract is with the hospital and not with the supervising physician. Without being registered with the LOP, trainees and their families are not entitled to compensation from the order. Since they should be salaried by the hospitals, by law, the cost of hospitalization for any work-related injury is the responsibility of the employer.[22] In case of death due to a work-related injury, it is the responsibility of the employer to compensate the family of the deceased with a sum, the value of which depends on the salary last earned by the deceased.[22] Trainees also have the right to receive the same wage from the hospital for up to 9 months, if their disability is caused by a work-related injury.[22]

Gaps Uncovered by the COVID-19 Pandemic:

Physicians who contract the virus and require hospitalization are being treated by the hospitals they work with. However, when beds are no longer available for them at their hospitals or in cases where physicians work at hospitals with no COVID units or do not work at hospitals at all, they are treated like any other patient and given no priority. The Ministry of Public Health (MOPH) helps with some of the costs just like all other citizens. While the LOP does cover the deductibles required by the NSSF and insurance policies, certain parts of the hospital bill, are not covered for physicians, as is the case with other patients leading the head of the LOP to urge hospitals to cover 100% of the bill for physicians being treated for COVID.[18]

One major gap in compensation and coverage concerns the trainee physicians. While a few teaching hospitals adhere to the law and ethical ideals, and offer their trainees healthcare coverage, others do not offer any compensation. In fact, many trainee physicians do not receive any payments or benefits during their training. There is also no standard contract for trainees, which leaves room for huge disparities among different training centers.

Physician Protection

Lebanese laws clearly state that it is the responsibility of the employer to provide all that is needed to ensure the safety and health of employees in all areas where they perform their employment duties. It is also the employer's responsibility to take all necessary measures to protect all those employed and to maintain their health while providing their services.[23-25] Furthermore, failure to meet such responsibility can lead to the application of penal code statutes penalizing employers.[26]

These laws are legally binding in the relationship between employer and employee as specified in the law of contracts and obligations where the employee is the one who puts their work under the direction of the employer. This is the case of employee healthcare workers, and trainee physicians. Non-trainee physicians who work at hospitals are not considered employees, which is the same for physicians with independent practice.

The World Health Organization, through its constitution[27] and the Alma Ata Declaration[28] have stressed the need to protect the healthcare professionals during their work through taking precautions from workplace dangers, and combatting those dangers.

Failure to provide adequate PPE puts healthcare workers at risk while performing their duties and would be a violation of these laws and principles. Endangering the lives of healthcare workers at this juncture compounds an already-ailing system with disastrous action. The consequences would be catastrophic, especially in light of the economically driven exodus of physicians and nurses from the country.

It is important to note that physicians should not be and are not held liable if they deny a patient urgent care when the provision of care exposes the physicians to danger.[29] Based on that, a physician cannot be held liable for not providing care to a coronavirus patient if necessary PPE is not available.

Policy Suggestions

The coronavirus pandemic is an exceptional time and has put physicians in a strenuous situation.

Unfortunately, the law is silent as to what should be done in such situations as there are no laws that cover exceptional circumstances. The non-inclusion of physicians under labor laws is also an important gap. Amending labor laws and LOP regulations to cover emergencies or exceptional situations can remove ambiguity and clarify rights and duties. Moreover, legislation specific to healthcare worker protection and compensation due to COVID-19 can clarify roles and ensure better protection and fairness to healthcare workers.

Improving Physician Healthcare Coverage and Compensation

A. Non-Trainee/Senior Physicians

The laws in place for healthcare coverage and compensation are not specific for physicians; they are for employees in general. Since medicine can be an independent practice, physicians are not always covered by employment laws. These gaps should be addressed to ensure fairness in the healthcare system.

The compensation for disability or death given by the LOP (for both COVID-19 and non-COVID-19 related illness) is a fixed amount for all physicians. A value calculated based on declared income or potential income would be a fairer alternative. This would require the LOP to avail registered physicians of a broader spectrum of coverage options based on a scale of registration fees adjusted to declared income or based on optional purchase of additional coverage at a group negotiated rate. In addition, experience during the pandemic raised questions as to what is covered by the NSSF and other agencies on the treatment bill and what is not. A clear written protocol should therefore be put in place to specify how such decisions ought to be made.

B. Trainee Physicians

Another major gap to be addressed is protections for trainee physicians, particularly those working with hospitals or institutions that do not offer healthcare coverage. Many of them receive low or no income and live below poverty level, placing them in the most vulnerable category of healthcare practitioners. Addressing their plight involves a multi-prong approach.

On one hand, the LOP can facilitate their enrollment by creating affordable categories of membership for trainees and medical students, thereby providing them with necessary healthcare coverage and disability compensation. This membership status can be time limited by age or number of postgraduate years. After that, the trainee would become a full member and pay regular membership fees. Recently, the LOP made it possible for trainees to pay membership fees over 24 installments using a bank loan, with the LOP covering the interest due.[9] Despite trials to overcome membership fees challenges, due to the economic crisis Lebanon was facing at the time, loans were not distributed during this period.

On the other hand, the LOP and the MOPH can push to set minimum standards for the contractual relationship between the trainee and the teaching hospital. These standards would include full healthcare, disability and death coverage of the trainee, as well as minimum compensation for their work during training. Non-compliance with these standards would put the hospitals at risk of losing their academic and training credentialing and potentially losing their accreditation by MOPH. Trainees should also be made aware that they are entitled to NSSF enrollment by virtue of their status as university affiliated trainees.

Ensuring better Safety in the Workplace

In general, practicing physicians are not covered by labor laws, and there are no regulations for their protection in the workplace. As for salaried physicians, including trainee physicians, the Lebanese law places responsibility on employers to ensure the protection of their workers. This has put hospitals in a predicament in light of the current difficulties in procuring PPEs. Simply penalizing hospitals is not a solution to ensure the adequate availability of PPE and other equipment. Adequate policies and measures should be implemented by governing bodies in order to ensure protection of healthcare workers and subsequently the survival of the healthcare sector. These policies could also set standards against which hospitals can be held accountable. To implement and enforce these provisions, the MOPH, in collaboration with the Ministry of Labor, should establish a national program/agency that is specific to healthcare worker protection with a mission to develop these provisions and oversee their implementation nationwide.[30] A good example to emulate would be

the Occupational Safety and Health Administration (OSHA) created by the US Congress to ensure safe and healthful working conditions for workers by setting and enforcing standards and by providing training, outreach, education and assistance.[31] This can include senior physicians who work in hospitals but are not employees, as well as those with independent practice. Physicians in independent practice are at a disadvantage with regards to PPE procurement as they are responsible for their own PPE. They do not benefit from bulk discounts that hospitals can negotiate and have a hard time procuring PPE during shortage periods. Open bids for medical supplies and group negotiated prices by the LOP can help independent physicians procure their practice needs, including PPE, at more affordable rates.

Adequate Availability of PPE

It has been shown that adequate availability of PPE and the quality of PPE decrease the risk of getting infected by COVID-19, while the re-use of PPE might confer increased risk.[14] Insuring the quality and availability of PPE should be the goal of any policy. Calculators that can forecast the quantity needed for PPE have been developed and tested in Lebanon. These calculators also show the dependence on stringency in social distancing policies, where the more stringent the policies are the less the need for PPE; conversely, relieving restrictions is associated with a higher need for PPE.[32]

The WHO proposes a framework of three principles to ensure the availability of PPE.[33] These principles are reducing the need for PPE, appropriate use of PPE, and supply chain coordination. Reducing the need for PPE occurs through changes in patient and healthcare worker scheduling, while appropriate use of PPE is the application of PPE as per indications. Both principles are mostly the responsibility of the hospitals and their respective professional bodies. Supply chain coordination is the responsibility of the government where it should ensure that all parties receive their needed supply and prevent stockpiling. The government can also take all necessary steps to incentivize the local production of PPE. Transparency is important here; in this sense, the authorities should keep the public informed vis-à-vis PPE availability and distribution plans to various areas and hospitals. The government's role is to oversee adequate procurement and distribution of the needed safety resources, and to ensure that the consumption of specific PPE (such as N95 respirators and surgical masks) is not abused and that distribution is prioritized for healthcare use in times of shortage. Given the scarcity of PPE supply and the need to procure it from any available source, quality assurance is necessary. Unfortunately, this has yet to happen and governmental authorities need to step-up and fulfill their duty vis-à-vis quality review and certification of healthcare products.

With the imbalance between a short supply and a high demand for PPE, procurement could be a challenge. To decrease competition between parties over PPE supplies, the WHO and Doctors Without Borders (MSF) have established a supply portal through which countries can order PPE.[15] Collaborative procurement efforts have also been made between unions such as that between the African Union and the European Union.[15] Starting a collaboration with other countries as part of trade deals for PPE, for example, may be a strategy that the Lebanese government can use to ensure adequate provision. Quality assurance should be taken into consideration when entering those deals. Even though there is enough PPE available currently in Lebanon, a long-term strategy should be adopted to ensure the country always has a sufficient supply to cover demanding situations, similar to what we experienced during surges of COVID-19. The gaps identified and the proposed solutions are summarized in table 1 below.

Table 1: Summary of gaps identified in physician coverage and protection and policy suggestions for each of these gaps. (LOP: Lebanese Order of Physicians, MOPH: Ministry of Public Health, PPE: Personal Protective Equipment)

	Gaps	Suggestions
Physician Healthcare Coverage and Benefits	Trainee Physicians	Facilitating LOP Enrollment
		Standardizing training/work contracts
	LOP Physicians	Compensation for Disability or Death based on declared income
		Protocol between MOPH, Lebanese Syndicate of Hospitals, and LOP on payment of uncovered parts of hospital bill
Safety in the workplace	Absence of Specific Health Care Worker Labor Laws	Legislating laws for specific healthcare worker hazards (e.g. Covid) and exceptional circumstances
	Absence of Regulatory Bodies for Workplace Safety	Regulatory Agency ensuring adequate standards are met
	Inapplicability of Labor Law employment relationship to Physicians	Inclusion of physicians in specific healthcare worker safety laws
	Private Practice Physicians have to secure their own PPE	Collective Bargaining for PPE via LOP.
PPE Availability	Lack of National Strategy for continual availability	Trade deals
		Decreasing needs
		Emergency supply
		Quality Assurance

CONCLUSION

With the rising numbers of COVID-19 cases, healthcare worker coverage and protection are critical for the survival and performance of this vital sector. There are many loopholes in the laws and regulations protecting physicians' health and welfare. The COVID-19 pandemic has brought these gaps to light more than any other crisis before. In the absence of laws that are specific to the COVID-19 pandemic, or for exceptional situations in general, action is needed now to set uniform standards for all to follow. The LOP regulations should be adapted to facilitate trainee physician enrollment so that they can benefit from the protection that the order affords its physician members. Furthermore, policies should be enacted to ensure safety and adequate supply of safety resources (PPE) in the country, with a clear and effective national response coordinated by the MOPH. The wellbeing and safety of healthcare workers is paramount, especially in these trying times and society cannot afford exposing them to otherwise avoidable risks and uncertainties in their healthcare coverage and safety – both personal and financial. This article focused on the specific needs of physicians, but similar needs exist for other healthcare workers including nurses as they are a crucial part of the healthcare system and have also felt the toll of the COVID-19 Pandemic.

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