WORKPLACE SAFETY IN HIGHER EDUCATION INSTITUTIONS DURING COVID-19 EPIDEMIC: INSIGHTS FROM A DEVELOPING COUNTRY

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ABSTRACT

The COVID-19 outbreak has drastically impacted every aspect of our daily life; higher education is not an exception. Universities were rushed into online lectures due to various restrictions ranging from social distancing to complete lock down. Instructors were asked to convert their course material into an online format, deliver online lectures, use various assessment methods and conduct exams online. Yet, as restrictions started to ease some aspects of the teaching process were to be performed on-campus. Higher education institutions have taken various strict procedures to ensure the health and safety of their staff and students. This study explores the workplace safety procedures employed by higher education institutions in Jordan during the COVID-19 outbreak. The results demonstrate that universities have taken various safety procedures and extra precautions to ensure the continuity of the learning process while sustaining the health and safety of their academic and administrative staff and students. However, fear of the unknown (COVID-19) remains a major challenge.

Keywords: Workplace safety, Covid-19, Distance Learning, Developing Country

INTRODUCTION AND CONCEPTUAL BACKGROUND

The outbreak of COVID-19 in Wuhan, China, at the end of 2019, has been one of the worst health emergency that caused the infection of over 168 million and death of over 3.5 million globally as announced by WHO in 28th May 2021. This virus is highly portable and deadly infectious were patients may experience flu-like symptoms to life-threatening conditions (Bashet et al., 2020). By 9th March 2020, COVID-19 has spread into seven continents and more than 110 countries and by 11th March 2020, the WHO declared it as a pandemic (Wong et al., 2020). With the lack of specific treatment for this virus and the massive spread of it all over the world, countries have taken stringent procedures in an attempt to slow down and control the spread of COVID-19. These procedures range from promoting social distancing, to quarantine and lock down. All kind of face-to-face activities were cancelled and prohibited including all forms of education at all levels (Livari et al., 2020). According to the UNISCO, over 60 countries in Europe, North America, South America, Asia, Africa and the Middle East, have announced university closures by 13th March 2020. Approximately 1.725 billion learners were affected by universities' closures (Dietrich et al., 2020). However, the teaching process did not stop, educational institutions restored to various formats of distance learning to be able to continue delivering educational materials while adapting to this sudden and dramatic consequences caused by the outbreak of COVID-19 (Bao, 2020; Nogales et al., 2020; Lepp et al., 2021).

Distance learning is not a new concept; it has been there for at least a century. During which education has moved from chalk-and-talk classes to real-time internet courses (Dietrich et al., 2020). Originally, distance learning was designed to serve students who do not have access to schools and universities, have specific conditions that prevent them from attending the

conventional learning environment (Casanova et al., 2006). The underlying premise of distance learning is the theory of independent study, which postulates that successful learning can be achieved even if learner and tutor are physically separated during the learning process (Moore, 1973). This method of learning has witnessed a massive transformation over the years facilitated by the huge advancements of technology such as; smartphones, tablets, 4G/5G network, videoconferencing and most recently social media (Choudhury & Pattnaik, 2019; Moghavvemi et al., 2017). In the last decade, many educators have introduced many innovative tools to the field of distance learning to create an interactive, collaborative and engaging learning atmosphere such as; the use of videos, simulation, real-time experiments, games with educational objectives, virtual reality and augmented reality (Da Silva Junior et al., 2020; Almajali et al., 2021; Bennie et al., 2019).

During the COVID-19 outbreak, the Ministry of Higher Education in Jordan launched a plan for universities to assure the continuity of the teaching process and guaranteeing that all universities are offering their courses online. Announcing the suspension of face-to-face on-campus academic activities and shifting to emergency distance learning since mid of March 2020 were among the nationally declared precautionary and control measures to fight COVID-19 (Akour et al., 2020). This strategy imposed an unprecedented academic experience on both students and staff regarding how to manage the distance learning. However, as the epidemiological situation started to improve, restrictions began to ease and universities faced many challenges regarding to various aspects associated with the management of returning to normal on campus activities including teaching laboratories, conducting exams, holding meetings and managing paperwork. All these challenges raised concerns about the health and safety of both staff and students.

Workplace health and safety refers to the integrated mechanisms and procedures implemented for managing and controlling risks that could impact the health and safety of workers in enterprises. It involves three main areas including; hazard identification, hazard risk evaluation, and risk control (Judeh et al., 2020). The WHO announced several guidelines for protecting both health and non-health workplaces. As for non-health workplaces, six procedures were recommended to ensure workplace safety during COVID-19 outbreak including; facility cleaning, hand-washing, respiratory hygiene, travelling advice, promoting the message of "be responsible and stay at home", finally managing meetings and events (World Health Organization, 2020). Simultaneously, the European Agency for Safety and Health at Work, the International Labor Organization and the Canadian Centre for Occupational Health and Safety have all announced guidance for preventing the spread of COVID-19. This guidance included instructions about disseminating information about the virus, cleaning premises, promoting sanitizing and wearing masks, managing confirmed cases and managing travelling and meetings (Wong et al., 2020). However, there is avoiding of research that explores workers views about the practice of the suggested measures concerning COVID-19 in workplaces. Therefore, this study aims to fill this gap by exploring academic and administrative staff views and concerns about workplace health and safety procedures employed in Jordanian universities.

RESEARCH METHODOLOGY

30 qualitative semi-structures interviews were conducted with 20 academic staff and 10 administrative staff from two Jordanian universities. Semi-structured interviews were deemed the most appropriate in this study which fits the exploratory nature of the study and enables the interviewer to design a protocol with a flexible list of open-ended questions based on the research topic while allowing the interviewee to elaborate, expand, provide examples, or re-direct the discussion into hidden areas of interest (Flick, 2014). "Semi-structured interviewing is

useful in situations where broad issues may be understood, but the range of respondents' reactions to these issues is not known or suspected to be incomplete" (Spanoudakis et al., 2009).

Participation was voluntary and interviewees were informed that their responses would be anonymised and recorded. All interviews were conducted over the phone, Microsoft Teams or Zoom. The interview guide was developed based on the study objectives, literature review and the WHO recommendations. Interview questions covered the following areas; workplace safety instructions, hygiene practices, availability of sanitizing and protective equipment, access to updated information about COVID-19, instructions for gatherings and meetings and finally overall self-report stress and workplace stress about being infected with COVID-19 or family member being infected. The interview guide was written in English, however, all interview were conducted using both English and Arabic. Interviews were conducted by the researchers between February and March 2021. Each interview lasted between 30-60 minutes. Interviews were then transcribed and data were coded and analyzed using NVIVO 12.

RESULTS AND DISCUSSION

As for the first theme concerning workplace safety instructions, interviewees highlighted some of the safety procedures that were implemented in their institutions including; conducting exams online, and in case of on-campus exams, health precautions were employed to ensure the safety of both staff and students. Moreover, both institutions organized open day for COVID-19 vaccination for all their staff. Some of these procedures are demonstrated in the following quotes:

"We conducted some of our exams on campus on different sessions and with minimum capacity to ensure the utmost safety of both students and instructors".

"We did not want to put ourselves or our students in a risk so we preferred to conduct most of our exams online especially in courses with high number of students".

"I got the COVID-19 vaccine in the university during the open day, I was a bit hesitant about it, but then I found that all my colleagues were taking it, so I did so and now I am really thankful for the University for making it available for us".

As for the second theme relating to hygiene practices, both institutions sanitized all their offices and labs periodically, operated with minimum capacity, temperature were measured before entering university campus and instructors were given the choice of delivering lectures from their offices or from home. Additionally, in scientific faculties that have practical courses delivered in laboratories, the numbers of students who are allowed to enter the labs were minimized and enrolled students were distributed into different sessions. Some of the interviewees' responses are reflected in the following quotes,

"My office was sanitized couple of times during the semester".

"Each and every time I enter the University; they measure my temperature and ask me if I have any flu-like symptoms".

"I taught all my lectures online from my home, and that was absolutely fine in my faculty, actually it was not only me, a couple of my colleagues did that too".

"We ran our labs on many sessions; in each session only 10 students were allowed to enter the lab. We assured that all students were wearing masks and all equipment was sanitized after each session".

Regarding the third theme concerning the availability of sanitizing and protective equipment, both institutions installed several sanitizing tools on their premises. These tools were periodically checked and refilled. Boxes of face masks were also available everywhere. Moreover, in the case of confirmed COVID-19 infection, the infected office was sanitized and closed for 48 hours for extra precautions. Some interviewees' commented,

"Two sanitizing tools are installed in my lab and I make sure that are fully loaded every day, there is also a box of face masks".

"In fact, safety instructions are everywhere in the University. You barely see a wall without a sign that remembers you to wash and sanitize your hands".

As for the fourth theme relating to the access to updated information about COVID-19, weekly emails were sent to all staff to inform them with the latest epidemiological situation and to provide them with up-to-date safety instructions and information about how to stay safe on campus. Safety protocols were also updated and disseminated to all staff. One interviewee commented, "I am continuously up-to-date with the safety instructions, I receive weekly emails that emphasize the safety procedures on campus".

Regarding the fifth theme concerning instructions for gatherings and meetings, both institutions held most of their meetings online, limited numbers of employees were allowed to be in the same office, staff was also informed to avoid all kinds of social gatherings. Further, all travelling arrangements were suspended including the participation of international conferences. Some of the interviewees' responses are reflected in the following quotes,

"No more than two employees were allowed to be in the same office, we have extreme restrictions when it comes to gatherings".

"Since the COVID-19 outbreak we used Microsoft Teams to conduct all our meetings online".

"I was supposed to attend a conference in France this summer; COVID-19 has changed all our plans".

Finally, regarding the last theme relating to overall self-report stress and workplace stress about being infected with COVID-19 or family member being infected, infected staff were given a paid sick leave for two weeks, returning to work is associated with providing negative PCR. Moreover, confirmed cases were traced to ensure the control of the virus spread. Some of the interviewees' responses were:

"I had 3 weeks sick leave until I tested negative".

"I was told to self-isolate myself at home for a week; I was in the lab with the engineer who tested positive that day".

"I was given a paid sick leave for a week since I was in a direct contact with a confirmed Coronavirus case".

Despite all these safety procedures, it is worth mentioning that, throughout the interviews it was difficult to overlook interviewees' fear and anxiety about the possibility of being infected while working on campus. It was also clear that most of the interviewees were reluctant about returning to traditional university life on campus with full capacity and delivering face-to-face lectures. Others still have concerns about the safety of the COVID-19 vaccine and were hesitant about being vaccinated. This raises concerns about the ambiguity and uncertainty associated with the COVID-19 and the preparedness of both academic and administrative staff to deal and cope with such extreme health emergencies and epidemics. Such findings emphasize the significance of formulating comprehensive practical occupational health and safety guidelines along with emergencies plans, in addition to the need of conducting continuous professional training about infectious disease control allowing the reflection on observed similarities and differences between different infectious viruses."

CONCLUSION, LIMITATION AND FUTURE RECOMMENDATIONS

The results of this research showed that higher education institutions in Jordan have employed various strict procedures and extra precautions to ensure the continuity of the learning process while sustaining the health and safety of their academic and administrative staff and

students during the outbreak of COVID-19. These procedures fall within six main categories; workplace safety instructions, hygiene practices, availability of sanitizing and protective equipment, access to updated information about COVID-19, instructions for gatherings and meetings and finally overall self-report stress and workplace stress about being infected with COVID-19 or family member being infected. However, the ambiguity and uncertainty associated with the COVID-19 remains a major challenge that institutions need to consider on how to enhance the preparedness of their academic and administrative staff to cope with extreme health emergencies and epidemics. This research was limited by the number of interviews and that interviews being conducted in two universities which could affect the generalizability of the results. Therefore, future research might broaden the research context to more universities or considering other countries or even digging deep to explore the reasons behind staff fears about COVID-19 and hesitation about vaccines.

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