Brief Report

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Decision-Making Prepandemic: University Curtailment of Academic Operations Closure Processes During the Novel Coronavirus Disease 2019 (COVID-19) Outbreak

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Abstract

Objective: Through in-depth interviews, this study aimed to understand perspectives of key stakeholders regarding the decision to curtail academic operations in the setting of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) outbreak before the declaration of a pandemic on March 11, 2020, and how such processes may be optimized in the future to best protect public health and safety.

Methods: Virtual interviews with key stakeholders from 4 academic institutions were conducted from September to December 2020 using a standardized interview question template. The interviews lasted approximately 30-45 minutes and each interview was recorded with permission. The interviews were then transcribed and reviewed for qualitative analysis.

Results: The decision to curtail academic operations involved several common themes, such as discussing how institutions would control the outbreak and the process of transitioning to virtual learning and remote work. Universities were monitoring other universities' responses as well as evaluating the prevalence of cases nationally and globally. Risks and challenges identified included housing for international students, financial implications, and loss of academic productivity.

Conclusions: The decision-making process may be optimized in the future by focusing on communication within a smaller committee, prioritizing epidemiology over fiscal implications, and embracing an openness to consider new strategies. Further research regarding this topic should be pursued to best protect public health and safety.

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The spread and severity of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) led the World Health Organization (WHO) to officially declare coronavirus disease 2019 (COVID-19) a pandemic on March 11, 2020.[1,2] This declaration established new recommendations for the public that included social distancing, quarantining, facemask use, and education regarding proper hand washing techniques.[3] By the end of April 2020, in-person operations ceased across higher education institutions in 179 countries.[4,5] Approximately 45 universities and colleges in the United States made the decision to suspend academic operations before WHO's declaration on March 11, 2020. This decision was based on numerous factors including safety, technological, financial, and ethical implications.[3] This study includes in-depth interviews with key stakeholders to better understand perspectives regarding how decisions to curtail academic operations were made before WHO's declaration of a pandemic and how such processes may be improved in the future to best protect public health and safety.

Methods

We identified contact details of key university stakeholders, namely Presidents and Chancellors, from 41 higher education institutions that curtailed academic operations before March 11, 2020. After institutional review board (IRB) approval (2003934457) was granted by West Virginia University, a cover letter was drafted, personalized, and emailed to each institution.

The low initial response rate prompted a second email to other stakeholders such as Vice Presidents, Provosts, and Deans who were involved in the decision-making process. Four institutions and respective stakeholders were willing to participate in the study: University of California, Berkeley's Vice Chancellor for Administration (Berkeley), Tufts University's Dean of the School of Arts and Sciences (Tufts), West Virginia University's Vice President for Strategic

Initiatives (WVU), and The Ohio State University's Vice Provost for Academic Programs (OSU). Written consent was received from all participating parties. After obtaining consent to participate, interviews were scheduled with each stakeholder. Interviews occurred between September to December 2020.

Each interview was conducted virtually and included the interviewee, the primary interviewer (H.H.), and a secondary interviewer (S.V.). The interviews followed a semi-structured interview protocol that began with a standardized introduction and then followed with a series of questions using a pre-established template (Supplemental Material). The first set of questions involved asking the participants their positions and roles at their respective university, experience during COVID-19, and any previous experience with university curtailment of academic operations. The second set of questions established how the university responded to COVID-19 and the point at which respective institutions made the decision to alter operations. The third set of questions explored what processes were used to reach the decision of university curtailment, assessing risk, the use of guidance or emergency plans from organizations such as the Centers for Disease Control and Prevention (CDC) or WHO, implications of curtailing academic operations, and ways to potentially improve university decision-making and policies related to curtailment of operations in the future.

Each participant received an identical set of questions. The interviews lasted approximately 30-45 minutes and each interview was recorded with permission. The interviews were then transcribed with the help of online software (Otter.ai) and reviewed during qualitative analysis.

Results and Discussion

Transition to Virtual Learning and Remote Work

Each institution reported the need for quick decision-making and implementation. One of the themes echoed throughout the various institutions was the fact that prior experience with natural disasters and/or adverse situations extensively assisted with the transition to virtual learning. Regarding transition to online content, Berkeley stated, "The reason it worked was the prior fall, we'd gone through two smoke events." He pointed out that these smoke events led the University of California, Berkeley to closing down academic operations for 5 days, and during this time all classes were conducted virtually. He also stated, that after these events, the Chair of the Academic Senate created a committee of faculty and staff to review effective methods to deliver online content. The group met on a regular basis before WHO's COVID-19 pandemic declaration to ensure students would still be able to have a quality virtual education. Thus, he stated, " . . . and so when we went into remote mode we were in pretty good shape." Tufts mentioned that, while having never experienced anything like COVID-19, the Boston marathon bombing of 2013 "did shine a light on our emergency planning and . . . who would make the call . . . and that probably was helpful in this circumstance." This illustrates the importance of prior experiences in crafting policy- and decision-making to ensure that future disasters and/or pandemics are met with quicker decisions and more effective plan implementation.

Universities across the country quickly established which services were to be suspended and which would remain operational. In-person classes, domestic and international institutionally-related travel, and community events/meetings were all curtailed while police/security, maintenance staff, and animal research remained operational at limited capacity. International students and students who otherwise would not have had a home in which to go stayed on campus. WVU stated, "One hundred students from our dorms indicated they really couldn't leave. And so we did take care of them. We did keep dining services up and running to where food would be available." All the institutions interviewed tailored their operations so that these students still had proper housing and food amidst the widespread shutdown.

A consensus existed that one of the major difficulties of curtailing university operations was the transition to online content. Tufts stated, "Part of the challenge was getting faculty ready who were not prepared . . . were not used to the technology or comfortable with it." To mitigate some of this hardship, some institutions such as Tufts and OSU extended spring break to provide greater preparation time and acclimation to virtual learning. Other issues that developed across institutions were the implications of utilizing technology such as video meetings (e.g. Zoom, Video Communications, Inc.), and whether it was a safe and private platform for students and faculty to use. Synchronicity also was an issue with regard to online content as students in other parts of the world had to attend mandatory lectures at atypical times.

Influence From Other Universities

All stakeholders stated that the decision to curtail university operations occurred before or during the first few days of scheduled spring break. One of the common themes shared by all 4 of these universities during the decision-making process was envisioning how each institution would control an outbreak. Berkeley stated, "What would an outbreak look like on the campus?" Most institutions were limited in the amount of available dormitory rooms needed for adequate isolation. As hospitals were reaching capacity nationally and ventilators and personal protective equipment (PPE) were becoming short in supply, Tufts mentioned "not overwhelming the hospital, not knowing or seeing a lot of bad things and then not really being prepared from a PPE standpoint and stockpiles of what you would need to have" was critical in the decision-making process.

Makeup of Decision-Making Group

The decision to curtail services during COVID-19 was made by leadership committee(s) of varying size and composition depending on the institution. One common theme was the disadvantage of having a large number of individuals involved in the decision-making process. Berkeley stated, "I think one of the lessons we've learned is a smaller group, especially at times like this, really is more effective." OSU stated, "In terms of my own experiences, it's difficult when you're trying to get things done when you've got such a big committee and such multiple perspectives." Based on these interviews, students are most benefited through decision-making from a small committee to quickly act and implement a plan during a disaster. Similarly, Baylor University, in describing resuming university operations in August 2020, suggested the use of sub-groups with representatives from various disciplines to develop, guide, and support implementation of public health measures.[6]

Guidance From Experts

A mixed response existed with regard to whether or not guidance from the CDC or WHO was used to help decide whether or not to curtail academic operations. A common theme, however, was

institutions closely monitoring cases. Berkeley stated, "We were monitoring where we saw these hotspots and what they were doing, and just extremely aware of what was going on in the world." Tufts stated, "I do remember watching reports closely in Washington state, Ohio, New York and the guidance that was in the data coming from there." Thus, an important factor in the decision to curtail academic operations was tracking the data and reports from cases worldwide.

Other Risks and Challenges

Institutions were concerned about several risks that could potentially unfold with suspension of operations. Stakeholders commonly discussed international students' potential inability to travel. OSU stated, "We have a large number of international students and those who either couldn't get home or got home and couldn't get back as time went on." Another concern was the loss of academic productivity among faculty and students. WVU stated, "Undergraduate lab work is hard to do in an online environment without a lot of preparation time." Ultimately, these risks were effectively managed by these institutions through swift decision-making and the ability to adjust accordingly.

Several implications of curtailing academic operations at these institutions emerged. Financially, institutions refunded students who were forced to leave their dormitories, and this caused a decrease in revenue. The summer courses in 2020 were all online as well. However, institutions noted that faculty and students working remotely and halting institutionally related travel also led to a reduction of costs. Academically, pushback was palpable against institutions that switched to a pass/fail grading system and some frustration was evident with regard to cancelling commencement. Based on interviewees' observations, research output was also slowed substantially due to the curtailment of academic operations.

Room for Improvement: Future Recommendations

When asked about how university/college decision-making can be improved in the future, several points were illustrated. First, less emphasis should be placed on fiscal implications and more focus on the epidemiologic aspects of an evolving pandemic. Berkeley stated, "I don't know if we made the best decisions and the decisions we've made have been extremely hard because we have this cloud of debt hanging over us." Second, the importance of regular communication cannot be overstated. Tufts stated, "I think the biggest issue for us is communication. I don't think you can communicate enough and I think you have to have a very regular committee." Third, having guidance documents already in place to quickly review and understand specific metrics to help lead decision-making is essential. WVU stated, "The key guideposts for decision-making is something that would have helped us moving forward in terms of what are the key factors we should be looking at that we did on the fly." Last, institutions need to reevaluate policies and procedures, not just during the actual response to a disaster. OSU stated, "I think we need to be open to continuously evaluating our policies and procedures, whether there's a pandemic or not." These are all factors that may improve decision making at a university level in preparation for future disasters.

Limitations

The biggest limitation of this study was the small sample size of institutions and stakeholders interviewed. More than 40 institutions were contacted, however, only 4 institutions agreed to be a part of the study. Of the 4 institutions interviewed, only 1 stakeholder from each university participated in the study. Ideally, interviewing stakeholders from more universities as well as interviewing multiple stakeholders at the same institution would allow for stronger analysis on common themes and perspectives of the decision-making process in curtailing academic operations. However, this report provides a unique insight into the decision-making processes of key stakeholders before the declaration of a pandemic during a very dynamic phase of disaster response, and, thus, contains informative merit to serve as guidance in future similar scenarios.

Conclusions

The COVID-19 pandemic forced academic institutions from all over the world to make challenging decisions with regard to curtailing academic operations. Each stakeholder highlighted the importance of communication within the institution's leadership committee as well as listening to and observing what stakeholders from other institutions were doing to garner new ideas and practices for better disaster management. They also agreed on the need for university decision-making to be performed within smaller committees as well as learning from prior disaster experiences to maximize efficiency and optimize plan implementation. Other themes echoed in our analysis included prioritizing epidemiology over fiscal realities and openness in considering new ways of performing tasks at the university level to better serve the public. The findings from this study illustrate the importance of further research on university and college higher education institutional decision-making for disasters and pandemics.

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