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Emerging Symptoms of and Institutional Support for Students with Long COVID in Higher Education

Katherine Aquino Jane Jarrow Lisa Vance

Since its emergence in December 2019, SARS-CoV-2 and the subsequent COVID-19 pandemic have had a significant impact worldwide (CDC, 2022a). As of April 2023, there have been over 104 million cases of COVID-19 and more than 1.1 million deaths in the United States (CDC, 2022b). Emerging research has shown that individuals with previous SARS-CoV-2 infections may experience persistent symptoms known as long COVID, which can include cardiac abnormalities, cognitive impairment, fatigue, and other issues (Crook et al., 2021). Still, the long-term risks associated with and the impact of SARS-CoV-2 are not fully clear (Taquet et al., 2022). Hastie et al. (2022) found that approximately 1 in 20 people who were diagnosed with COVID-19 had lingering symptoms associated with long COVID 6 to 18 months following the initial infection.

The COVID-19 pandemic also negatively impacted the educational sector, including higher education (NCES, 2021a). According to NCES (2022), 16% of adults “who had household members planning to take postsecondary classes in fall 2021 reported that all plans to take classes in the fall had been canceled for at least one household member” (para. 1). For those able to return to or enter higher

education, many students may now come to campus with long COVID symptoms (Magee & Imad, 2022). Long COVID cases continue to increase within the higher education environment, and disability resource professionals (DRPs) warn that postsecondary institutions must better support this emerging student disability group (Redden, 2021).

Researchers have noted that students with disabilities are less likely to enroll in, persist within, and graduate from postsecondary education (Kutscher & Tuckwiller, 2018; Pingry O’Neill et al., 2012). Currently, there is a lack of research on students with long COVID in higher education, an emerging group of students with disabilities needing support and potential accommodations. Therefore, it is essential to explore how the higher education community supports this group as they enter or return to higher education with this new condition. The symptoms reported by students with long COVID can provide vital information on emerging trends related to support for this population within the higher education environment. The research questions guiding this study were: (a) What long COVID symptoms are students reporting to disability support services? and (b) According to DRPs, how have

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institutions addressed questions related to supporting students with long COVID?

METHODS

Data for this project were collected through a survey instrument developed by the authors and disseminated primarily through the Association for Higher Education and Disability. The instrument included questions about reported cases of long COVID among college students, the perceived challenges, and strategies and recommendations for supporting students with long COVID. Prior to data collection, the authors piloted the survey content with DRP and long COVID experts to ensure the accessibility and appropriateness of the instrument.

To better establish the importance of and commitment to the exploration of long COVID in higher education, it is important to note our positionality for the reader. Although we serve in different roles—a faculty member, a DRP, and a private consultant working for more than four decades in support of students with disabilities—we all are actively committed to and advocate for individuals with disabilities, including students experiencing long COVID symptoms within the higher education environment.

This project used descriptive statistics to organize and display findings. This paper includes the responses from 140 DRPs throughout the US. Nearly half of survey participants identified as the director of their institution's disability resource office (49.3%), with nearly two thirds (62.1%) supervising staff in their professional role. More than three quarters were White (82.9%), possessed a master's degree (77.9%), and identified as women (77.9%). When asked about the institutional characteristics of the survey participants, over half worked in public or state-sponsored institutions (57.1%).

RESULTS

To explore the specific conditions shared by students disclosing long COVID diagnoses, DRPs identified the reported symptoms related to accommodations requests. DRPs had the opportunity to document student symptoms (Table 1). Over half of DRPs indicated that students requested accommodations for long COVID-related mental fog (67.9%) and problems concentrating (58.6%), with nearly one half indicating students requested accommodations for problems remembering (43.6%). Approximately one third of DRPs reported students requested accommodations due to sleep-related long COVID symptoms (e.g., drowsiness, 30.7%). Additionally, DRPs reported a large proportion of somatic-related symptoms for long COVID accommodation requests, including fatigue (53.6%), headaches (40.7%), and breathing issues (33.6%). Of the surveyed DRPs, nearly three quarters (70.7%) reported that disability resource offices required documentation for accommodations related to long COVID symptoms.

To investigate how, if at all, higher education institutions were providing guidance and/or resources to support students with long COVID cases, DRPs were surveyed about institutional communication strategies used during the 2021–2022 academic year. Overall, the majority of DRPs noted limited outreach related to long COVID support. While 18.6% of DRPs were unsure of communication strategies made by their institutions related to long COVID, 46.4% indicated that their institutions had no such communication with the campus community. Over two thirds (67.9%) of the DRPs shared that faculty had yet to reach out to the disability resource office for guidance related to long COVID support for students. Additionally, over three quarters of surveyed DRPs noted that their disability resource offices had yet to provide any communication

Table 1.
Reported Student Long COVID Symptoms to Disability Resource Offices (N =140)

Symptom	% Documented by Disability Resource Office
Cognition	
Feeling mentally foggy	67.9
Problems concentrating	58.6
Problems remembering	43.6
Thinking slowly	37.1
Problems finding words	15.7
Emotional/ Behavioral	
Irritability/ feeling more emotional	22.2
Nervousness	15.7
Sadness	8.6
Sleep	
Drowsiness	30.7
Sleeping more than usual	28.6
Sleeping less than usual	10.0
Somatic	
Balance problems/ dizziness	29.3
Breathing issues	33.6
Fatigue	53.6
Headaches	40.7
Hearing/tinnitus	8.6
Light sensitivity	13.6
Noise sensitivity	7.9
Sense of smell	13.6
Sense of taste	13.6
Vision problems	7.9

or guidance to their campus communities on information related to supporting long COVID cases among students, with 78.6% not creating any faculty resources on long COVID and 83.6% not creating any student resources on long COVID. Lastly, 78.6% of surveyed DRPs' disability resource offices had yet to make any formal resource requests to their institutions' leadership to better support long COVID cases among students on campus.

DISCUSSION

Long COVID is still considered a new diagnosis, and the medical field has yet to establish a standardized definition of the condition (Purpura & Ryan, 2022). Though research has focused on long COVID (e.g., Pfaff et al., 2022), little of it has focused on the experiences of students in higher education. Of the documented cases noted in this paper, students requested accommodations related to cognitive impairments associated with long COVID

diagnoses, including having issues with concentration, fatigue, and persistent breathing issues. With greater awareness of long COVID, it can be assumed that the number of cases, including students requiring disability accommodations in their higher education coursework, will increase over time. Additionally, DRPs reported the overall lack of communication from institutional leadership, as well as through their disability resource offices, on long COVID initiatives and guidance for students. Limited resources to support students with long COVID may create both short- and long-term challenges for student success. As the health and well-being of students directly impact the functioning and success of postsecondary institutions, the intended audience for this paper includes higher education administrators and faculty members who directly support the needs of students within the campus setting. If faculty and administrators outside disability resource offices know the symptoms of long COVID, they may be more likely to refer students for the services they need. Without such knowledge, students may never get the help they need.

The COVID-19 pandemic created significant and lasting negative consequences on the educational environment (NCES, 2021b). There are several implications for researchers and practitioners to consider for individuals with long COVID diagnoses. Accurately tracking the number and potential shifts in long COVID symptoms over time will be an important aspect specific to this research. An empirical exploration of student support models focusing on the advocacy and guidance of students with long COVID diagnoses may be helpful for replication in various institutional settings. While this project focused on US higher education, additional research on students with long COVID attending international institutions of higher education is also warranted. Although long COVID is an emerging condition, it will be important for postsecondary administrators

to remain connected with other institutions to gauge student cases and support models between disability resource offices, counseling centers, and advisement services that support the success of students with long COVID. Once students with long COVID are identified within the disability resource office, the accommodations assigned for their support are dictated primarily by the functional limitations created by their symptoms rather than by the source of those symptoms. For example, the accommodations assigned for students with concentration problems because of ADHD would also be appropriate for students experiencing concentration problems because of long COVID. Many students come into the disability resource office to discuss issues but may not know why they are experiencing specific symptoms. Rather than basing accommodations on a diagnosis, DRPs should base them on the symptoms or functional limitations (Jansen et al., 2017).

Several limitations of this work must be addressed. Although this project recruited DRPs from all US postsecondary institutions, only 140 cases were collected and included in this paper. The sample was also smaller than anticipated. During the recruitment process, we encouraged DRPs to complete the survey even if they had zero reported student cases; however, many DRPs may not have completed a survey if they had yet to witness long COVID cases in their offices. It should also be noted that not all students with long COVID register with their institution's disability resource office. Survey findings are based on self-reported DRP data. While DRPs will have the most accurate knowledge of accommodation requests at their institutions, there are always potential flaws in self-reported data. Additionally, while the disability resource office is a key administrative unit to support students requiring accommodations for long COVID symptoms, other administrative areas, including student health, counseling, and institutional leadership, may

also need to be surveyed to fully understand how institutions are supporting students with long COVID through resources and communication. Lastly, data collection occurred in July and August 2022. The timing of the data collection was intentional—to capture information on long COVID cases among students during the 2021–2022 academic year before new reports were made for the 2022–2023 academic year. While the tight data collection window and focused question prompts were included, a participant may have had a different number of long COVID reports if they completed the survey at the beginning of July rather than the end of August.

Brüssow and Timmis (2021) found inequalities within communities in their effectiveness in helping those who were impacted by SARS-CoV-2 and long COVID. A college campus provides its own unique opportunities for community engagement. Imparting information to college administrators, faculty, and student services departments with widespread dissemination should allow college campuses to provide student supports that would assist with the cognitive, physical, emotional, and behavioral symptoms of long COVID. While research continues to identify the unique

features of long COVID, emerging data have highlighted the prevalence and frequency of the condition (Bull-Otterson et al., 2022). As the medical community continues to study this new condition, individuals with long COVID have begun returning to regular activities with new ailments and the possible need for accommodations to support their overall functioning. Specific to higher education, students request information and accommodations to support their pursuit of a postsecondary degree. While the 2021–2022 academic year served as the first time in history that students needed accommodations for a long COVID diagnosis, it is possible that students will need future support related to this condition (Vance & Aquino, 2023). Data from this study highlighted a wide range of documented long COVID symptoms, as well as the lack of institutional communication related to long COVID. Moving forward, disability resource offices and the higher education community as a whole will need to establish clear guidelines on how to support students with long COVID to ensure their success within the postsecondary setting.

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