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Higher Education in The Covid-19 Era: Challenges and Assessment

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Abstract: The Covid-19 era has brought significant changes to universities around the world, a change in the form of a transition from face-to-face learning to online learning. This change certainly presents a challenge for universities. The purpose of this article is to find out the challenges of education in higher education during the Covid-19 era and to find out how educational assessment were carried out during the Covid-19 era in universities. The research method used is library research, data sources in the form of articles with the theme of education in higher education from Scopus indexed journals. The instrument for collecting article data used the Publish or Perish application and the data analysis used content analysis. The results of the study found that there are various challenges faced by higher education, ranging from the unpreparedness of educational institutions in the transition to face-to-face learning to online learning, the use of technology in learning, internet access, maintaining health during the learning process, and reduced college finances due to the reduced number of students. Assessment is carried out online; the advantages of online assessment are in the form of speed and timeliness of the exam; the weakness is in the form of exam supervision, which is challenging to do. During online learning, students feel that they have lost contact with the teacher; it is necessary to find a solution to the problem.

1. INTRODUCTION

The year 2020 was marked by the Covid-19 era; this pandemic has spread throughout the world, causing drastic changes in all aspects of life. Higher education is one of the affected by the covid-19 pandemic; universities must be able to adapt to all new regulations related to preventing the spread of the covid-19 virus. Many rules are applied, one of which is social distancing, this rule requires universities to switch from face-to-face learning to online learning (Thunström et al., 2020). Online learning carried out by distance is the best alternative for learning to take place in higher education (Miñano, 2020). Higher education must make the right policies so that learning can continue well during the Covid-19 pandemic (Lawrence & Wu, 2020). Lockdown, in this extraordinary situation, requires universities to continue learning; one option is to carry out lectures with the concept of blended learning (Ożadowicz, 2020). All universities in the world have shifted from traditional education to technology-based learning, even with many challenges in the process.

The transition to online education using modern Internet technology has been made, which has led to specific challenges in the higher education system (Stukalo & Simakhova, 2020). The policy of using technology in responding to the Covid-19 pandemic brings its own challenges for higher education (Joaquin et al., 2020). Virtual classrooms have brought tough challenges to higher education, one of which is the lack of interaction in learning (Arora & Srinivasan, 2020). The covid-19 pandemic has forced universities to study online all day long; this brings its challenges, not to mention that distance learning is not liked by students (Pintarič & Kravanja, 2020).

Students agree with online learning, but are worried about their understanding of learning

and the final course grade (Hidayati & Saputra, 2020). The lockdown of all colleges causes anxiety in the learning and assessment process; this can have short and long term consequences (Sasere & Makhasane, 2020). There are many challenges faced in tertiary institutions and concerns in the implementation of the assessment process, so it is necessary to research this topic, to identify challenges and the ongoing assessment process. Based on this, the objectives of this article are: (1) to determine the challenges of education in tertiary institutions in the Covid-19 era; and (2) to determine the educational assessment process in tertiary institutions in the Covid-19 era.

2. METHODS

The research method used in this article is the library research method. Reference searches were carried out on the website https://www.sciencedirect.com/ using the search keywords "Higher Education" and "Covid". The instrument for collecting article data uses the help of the Publish or Perish application. Data analysis uses content analysis, which is useful for discussing and analyzing the content of the articles that have been selected. The search for articles was carried out in December 2020. In the initial examination, 79 articles were found with the keywords "college" and covid. The titles and abstracts were screened, after screening several articles were not included in the synthesis process. Only 16 papers were ultimately used in answering the problem statement. A total of 63 articles were not included because they did not fit the theme to be discussed. Complete data on journals and article titles that are the source of research data can be seen in Table 1.

Table 1. List of journal names and article titles

NO	Journal Name	Article Title
1	Dialogues in Human Geography	A COVID-19 panacea in digital technologies? Challenges for democracy and higher education
2	Asian Education and Development Studies	Acceptability and challenges of online higher education in the era of COVID-19: a study of students' perspective
3	Applied System Innovation	Business Continuity Plan in the Higher Education Industry: University Students' Perceptions of the Effectiveness of Academic Continuity Plans during Covid-19 Pandemic
4	Educational Assessment, Evaluation and Accountability	Challenges of remote assessment in higher education in the context of COVID-19: a case study of Middle East College
5	Journal of Advanced Research in Dynamical and Control Systems	Collaborative Mobile Seamless Learning (CMSL) based on Android Apps to Improving Critical Thinking in Higher Education in the Post-Covid-19 Era
6	Emerging Science Journal	Digital Readiness and Competitiveness of the EU Higher Education Institutions: The COVID-19 Pandemic Impact
7	Pakistan Journal of Medical and Health Sciences	Effects of Covid-19 on Higher Education: Challenges and Responses
8	Information Systems Management	Higher Education Amidst COVID-19: Challenges and Silver Lining
9	Industry and Higher Education	Lessons from COVID-19 and a resilience model for higher education
10	Pain medicine	Maintaining High-Quality Multidisciplinary Pain Medicine Fellowship Programs: Part I: Innovations in Pain Fellows' Education, Research, Applicant Selection Process, Wellness, and ACGME Implementation During the COVID-19 Pandemic
11	Law And Economics Yearly Review	Reimagining and re-designing the post-Covid-19 higher education organizations to address new challenges and responses for safe and effective teaching activities
12	Journal of Adult and Continuing Education	Reimagining higher education during and post-COVID-19: Challenges and opportunities
13	Journal of Chemical	Successes and Challenges: Online Teaching and

	Education	Learning of Chemistry in Higher Education in China in the Time of COVID-19
14	Sustainability	Impacts of the COVID-19 Pandemic on Life of Higher Education Students: A Global Perspective
15	Journal Pre-proofs	The COVID 19 Pandemic and Digital Higher Education: Exploring the impact of proactive personality on social capital through internet self-efficacy and online interaction quality.
16	Boletin de Estadistica e Investigacion Operativa	The impact of COVID-19 on teaching in statistics and operations research in higher education

3. RESULT AND DISCUSSION

3.1. The challenges of higher education in the covid-19 era

It is a big challenge for faculty members to provide education with modern technology because it is comparable to conventional methods. There are several hilly states where providing higher education in itself is a difficult task. Evaluation is another point of concern in online education, and also has several difficulties, such as the use of software, hardware, Internet access, etc. Creating a classroom climate is a challenging problem in online education (Bisht et al., 2020). The development of various operating systems, computer hardware, and software technologies, another obstacle faced by students is having to deal with different technical user interfaces. Learning experiences are preferred because they are engaging, interactive, meaningful, and suitable for the needs of learners in educational settings (Rasiah et al., 2020).

Lack of planning is the cause of the inherent problems of remote evaluation, conducting small evaluations during COVID-19, in particular, presents an unprecedented challenge for higher education institutions. Academic dishonesty, infrastructure, coverage of learning outcomes, and involvement of students in submitting evaluations are the main challenges found in remote evaluations (Guangul et al., 2020). The most prevalent issues, according to a survey conducted by the university, are 1. Maintaining the safety and health of students, teaching staff, and employees while trying to keep current activities regular; 2. Reducing student enrollments in the summer and fall; 3. Lack of public knowledge and inaccurate data generation. Additionally, living in countries where health care systems are ineffective makes it challenging to ensure that educational institutions are equipped to deal with crises. (Rezapour-Nasrabad, 2020).

Similar to this pandemic, the most critical and challenging problem arises from the level of preparedness on the part of educational institutions to face the crisis. Quality issues for distance learning Another strange problem arises from questions about the quality of online education. In the 2020-21 academic year, colleges and universities are already facing financial cash flow issues along with several uncertainties surrounding enrollment (Bhagat & Kim, 2020). One of the main challenges is to determine the most likely 'new normal' that will allow it to adapt to the new socio-economic system and absorb the necessary health and safety changes (Nandy et al., 2020). Perhaps the most critical risk posed by educational institutions is that administrators will experience a dizzyingly rapid transition to online education and suspect that digital technology will offer a long-term, company-mediated solution to the financing problem with greater notice and sufficient support services (Burns, 2020).

During their one-year fellowship, fellows with safe time to study and those with additional research time applied to their accord face unique difficulties resulting from sudden disruption of research activity and uncertain periods to bring back this activity (Kohan et al., 2020). This unrivalled challenge imposed by COVID-19 makes distance learning offer at preschool and school-age to the capacity and sensitivity of local authorities and thus to the dedication and transparency of educational institutions as a logical consequence of witnessing solutions and offering unequal opportunities within the national region (Pellegrini et al., 2020). The mobile application can overcome the challenges that exist in conventional learning (Yafie et al., 2020).

Although most campuses have trained educators to ensure consistency and maintenance of the curriculum with virtual classrooms, less attention has been paid to educating students who face the same challenges of adapting to this sudden change in curriculum delivery. The COVID-19 pandemic has enabled teachers and students around the world to adapt to an unprecedented challenge: transitioning rapidly from face-to-face education to a distance learning format via virtual classrooms in mid-semester. However, the real challenges are much deeper and more intrinsic. Some of the difficulties that students face and articulate are as follows: teaching their children full-time school work in the childcare/parent home while working on other tasks, sudden changes or changes in work schedules, job instability, and in some cases, lose a job, either by themselves or by a family member that students rely on for financial support (Neuwirth et al., 2020).

About 80% of students think that not having face-to-face contact with the teacher creates problems for them. Another big obstacle for some students (40 per cent) is that for different reasons, they don't have a thriving learning environment at home. The eighth challenge for students is eye strain due to long-term use of PCs and mobile displays. Experiments are an essential component of chemistry teaching and present particular challenges in terms of distance learning (Huang, 2020). Under challenging conditions (such as COVID-19), individuals with good personality qualities are in a stronger position to cope with tensions and challenges (Zheng et al., 2020). A detailed analysis of the situation in Latvia leads to the conclusion that Latvian higher education institutions have significantly increased the amount of digital content in both external and internal communication systems and can offer competitive educational services that match new academic requirements (Zalite & Zvirbule, 2020).

The big challenge in tertiary education is the use of technology; the use of this technology is mandatory because learning is done over a distance. The availability of the internet is necessary to support, for some areas that do not have a good internet network; it will be a big problem. If the use of this technology is not fair, it will automatically reduce the quality of online learning that is carried out. Another thing that becomes a challenge is to create a good learning atmosphere during online learning. Given the extreme pandemic circumstances, online assessment plans are still very minimal planning, not to mention the dishonesty of teachers and students, rendering the evaluation process much worse. Another difficulty in the form of performing evaluations, implementing evaluations seen online needs sufficient preparation.

Challenges are also found in the process of maintaining the health of students, lecturers, and academic staff; this is because learning is carried out during the Covid-19 pandemic, the Covid-19 virus is straightforward to spread between humans. Another challenge is the reduction in new students during the pandemic, and this has a direct impact on reducing college finances. Challenges are also found in the difficulty of lecturers to adapt to new habits in teaching; this is because lecturers have to learn many things in teaching online. Students also feel the challenge because of the lack of contact between students and their lecturers.

3.2. Assessment of education in higher education in the covid-19 era

Online evaluation can be useful for quick, timely, and sensitive evaluations, but it is essential for addressing issues such as evaluation of descriptive questions, strategies for various topics. The purpose of the viva video is to test students' real knowledge as students have the option of taking help from other tools in case of assignments. Still, it is a bit difficult to offer the content verbally if one doesn't know the problem correctly and this is probably the best technique for real evaluation right now (Bisht et al., 2020).

Assessment and transparency of education Another difficulty associated with COVID-19 is testing students remotely. In particular, remote evaluations during COVID-19 present tremendous challenges for higher education institutions due to the lack of planning that is superimposed on the inherent problems of short assessment. For example, combining different evaluation techniques, report submission with online presentations helps reduce academic dishonesty as reviewers will have the

opportunity to check whether student work is submitted work. This means using evaluation data in a diagnostic approach to identify abilities, gaps, and progress so that learners can change their teaching strategies, and teachers can adapt their teaching strategies. In particular, in remote evaluation, examinations are carried out to determine and prioritize the appropriate evaluation form for different modules to combat academic dishonesty. Students have access to the internet during take-home evaluations and can search for evaluation sentences or keywords and find answers if evaluations are copied from books or other sources. Different options for submission and assessment methods were given to respondents for task-based evaluation to prioritize according to suitability for each module. Especially for modules that require a computer laboratory and high internet speed to carry out a specific assessment, such as simulation work using ANSYS software, infrastructure problems may be a challenge. The evaluation form used for unsupervised evaluations is taken as a preventive method, and respondents are asked to identify an appropriate evaluation method (Guangul et al., 2020).

There is no question that online learning is a vital response in the midst of this current pandemic; however, educational institutions need to perform an assessment based on the skills, experience, and abilities they hope to impart to their students when assessing the efficacy, achievement, and job market consequences of online learning (Bhagat & Kim, 2020). This analysis should begin with an honest evaluation of the current situation and an understanding of what is possible about the end goal (Nandy et al., 2020). For this reason, the adequacy of evaluating the state of COVID-19 is very attractive: more than half of teachers have had to modify, or otherwise apply minor changes to their student assessments, using various methods such as job delivery, problems, online presentations, and different (oral, to be developed, multiple choice), etc. (Vega-Hernández et al., 2020).

The poll function, which allows participation and interaction with students, is another handy feature. Still, it can also be used for real-time evaluation of ideas, using a multiple-choice format. In our experience, students will not use discussion boards/forums voluntarily; Therefore, these practices need to be incorporated into daily learning activities and evaluation of results to be successful (Neuwirth et al., 2020). The pandemic has had a significant impact on higher education student activity regarding work and academic life (e.g. transition to online lectures/tutorials, closed libraries, modified instructor and administrative support contact networks, new evaluation systems, different workloads and outcome rates, etc.) (Aristovnik et al., 2020). Personality is one of the factors that influence stress assessment and response (Zheng et al., 2020).

Evaluation of learning during the Covid-19 pandemic was carried out online, such as learning which was also carried out online. Evaluation is carried out by considering efficiency and the achievement of learning outcomes. Online assessment, on the one hand, has the advantage of being able to be done quickly and on time. Still, on the other hand, online evaluations have weaknesses in descriptive questions and examination supervision. Learning evaluation is carried out by utilizing applications that require an internet network. The thing that influences the assessment process is student personality because student personality determines student responses to the stress experienced during online evaluation.

4. CONCLUSIONS

The challenges of education in higher education during the covid-19 period are many; the reason is that educational institutions are not ready for the transition from face-to-face learning to online learning. The biggest challenge is the use of technology in the teaching and learning process and evaluation, not to mention the uneven quality of the internet network throughout the region. Another challenge is maintaining the health of students, lecturers and education staff; this is due to the online learning being applied, which causes excessive stress. The challenge for higher education is in the form of a reduction in new students which has a direct effect on reducing the financial institution of educational institutions. Assessment is carried out online; this online assessment has advantages in terms of being fast and on time, but also has weaknesses in terms of exam supervision. The

important thing that is missing during online learning is the loss of contact between students and lecturers; this aspect must be a concern for improving online education.

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