

Current Situation of Education field due to Corona Virus Disease 19

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Abstract- The spread of corona virus disease 19 has drastically disrupted each aspects of human life including education. It has created an unprecedented test on education. In many educational institutions around the world, campuses are closed and teaching-learning has moved online. Internationalization has slowed down considerably. In India, about 32 crore learners clogged to go to schools/colleges & all learning actions brought to an end. Despite of all these challenges, the Higher Education Institutions (HEIs) have reacted positively and managed to ensure the continuity of teaching-learning, research and service to the society with some tools and techniques during the pandemic. This article highlights on major impacts of COVID 19 on HEIs in India. Some measures taken by HEIs and educational authorities of India to provide seamless educational services during the crisis are discussed. Due to COVID 19 pandemic, many new modes of learning, new perspectives, new trends are emerged and the same may continue as we go ahead to a new tomorrow. So, some of the post COVID 19 trends which may allow imagining new ways of teaching learning of higher education in India are outlined. Some fruitful suggestions are also pointed to carry out educational activities during the pandemic situation.

Keywords: COVID 19 , higher education, impact, India, post COVID 19

Abbreviations- COVID 19-Corona Virus Disease, WHO- World Health Organization, ODL- Open & Distance Learning

1. Introduction

The COVID-19 as a pandemic was declared by the WHO [1] on 11 March 2020 which has overstated more than 4.5 million peoples worldwide. In India, the 1st affected patient of COVID 19 was detected on 30 January 2020 in the state of Kerala & the pretentious had a travel history from Wuhan, China (Wikipedia)[2]. In India, the 1st death was reported on March 12, 2020 and the nation observed Janta Curfew for a day on March 22, 2020. This outbreak pandemic was evolved in Wuhan city of China and has affected many countries.[3]

The pandemic has significantly disrupted the growth of countries where the cases of novel coronavirus are reported. In order to reduce the crowd, countries are taking various measures such as lockdown, workplace non attendance, school closure, suspension of transport facilities etc. For controlling the spread of the COVID-19 pandemic, educational institutions have been temporarily closed by most of the countries around the world. Over 90 per cent student population of the world are affected by this closure nationwide. India is also suffering from the pandemic. In order to control the infection of COVID-19, Indian government has taken various measures such as on 22 March 2020, first Janta Curfew was announced by the Prime minister of India. Later on 21 days lockdown was announced by the prime minister of India to control the cases of COVID-19. On 14 April 2020, further the lockdown was extended by the Indian government till 3 may 2020. This decision is affecting the various sectors in the country. The education sector is also affected by the lockdown which is a critical determinant of the economic future of the country. As per the directives of the government, all schools, institutes & universities are closed. Whole education system is disrupted by the pandemic COVID-19.[4][5]

On 16 March, the government proclaimed a countrywide lock-down of schools and colleges. On 18 March, CBSE delivered modified rules for assessment centres. This incorporates keeping up a separation of in any event 1 meter between the understudies taking the test with a class not having in excess of 24 understudies. In the event that the rooms of the assessment communities are little, separate the understudies and cause them to sit in various rooms. On 19 March, CBSE and JEE primary assessments were delayed till 31 March. On 20 March, Maharashtra government dropped assessments for class 1 to 8 and elevated the understudies to the following classes, while assessments for class 9 and 11 were delayed till 15 April Madhya Pradesh Board of Secondary Education deferred board tests for class 10 and 12 and asked school chiefs to advance or keep understudies of class 5 to 8 dependent on

their exhibition in past terms. Board tests of class 10 and 12 were deferred in Kerala Assam government dropped all tests till 31 March. The Union Public Service Commission likewise deferred the meeting for the Civil Services Examination 2019 to be held from 23 March to 3 April. The SSC tests in Tamil Nadu and Pondicherry were deferred to 15 April.[6]

The purpose of this paper is to state the effects of lockdown on schools, universities, teachers and parents.

- Highlight the impact of COVID 19 on higher education sector.
- Enlighten various emerging approaches of India for higher education
- Enlist post COVID 19 trends of HEIs
- Put few suggestions for continuing educational activities of HEIs facing the challenges created by *COVID 19*.

Methodology

Various reports of national and international agencies on COVID 19 pandemic are searched to collect data for current study. As it is not possible to go outside for data collection due to lockdown, information are collected from different authentic websites, journals and e-contents relating effect of corona on higher educational system of India.

2. Impact of COVID-19 on Higher Educational Sector:

The shutdown of universities has also affected the student's learning in universities. In order to ensure the continuity in institutes and universities, one immediate measure is essential. To conduct the class smoothly, online teaching methodology is adopted. Learning management software and open-source digital learning solutions are adopted by the universities to run online classes. Higher education is a critical determinant of the economic future of the country and higher education sector has significantly affected by the pandemic as well. Many students from India enroll in universities abroad. Due to the global closure of the institutes and universities, it is expected that it will reduce the demand for the international higher education.

The main concern which is coming in the mind of everyone is the effect of the pandemic on the rate of employment. Because of the current situation, graduates who have recently completed their graduation fear from the withdrawal of job offers from corporate. Teaching methodology in institutes and universities has also transformed due to the lockdown in India. It has been replaced the old chalk-talk model with the new technology. E-learning solutions are making teaching and learning possible in this situation but engagement is a big problem attached with the e-learning. The policy makers are trying to solve the problem of engagement of students and tackling the digital divide .In order to manage the crisis in Indian education section, a multi-pronged strategy is necessary in the long term.

An effective education and well rounded practices are needed in India to build the capacity of young minds in this time of crisis. To ensure the overall progress in India, It will drive employability, well-being, health[12] and productivity through the development of skills. Pandemic *COVID 19* has severely affected the total educational system of India as well as the globe but some of the most impacted areas of higher education of India are as pointed below.

Destabilized all educational activities: Outbreak of *COVID 19* has compelled lockdown in every sector including education. The institutions got closed with cease of educational activities and created many challenges for the stake holders [7] (Pravat, 2020a). So, the various activities like admission, examinations, entrance tests, competitive examinations conducted by various boards/schools/colleges/ universities are postponed. Many entrance tests for higher study got cancelled which created a great challenge in the life of a student of higher education. The primary challenge was to continue teaching learning process when students, faculties and staff could no longer be physically present on the campuses. The obvious solution for the institutions was to depend online teaching learning. However, within a relatively short time, HEIs have been able to provide support to the students through online modes. *COVID 19* has accelerated adoption of digital technologies to deliver education. It encouraged all teachers and students to become more technology savvy. The HEIs have started conducting orientation programmes, induction meetings and counselling classes with the help of different e-conferencing tools like Google Meet, Skype, Youtube live, Facebook

live, WebEx etc. to provide support services to the students. This initiative has taken to create an effective virtual environment of teaching learning and to create motivation among students for online activities. The teachers and students improved the use of electronic media for sharing information by making use of WhatsApp, Google drive, Telegram, Twitter etc.[8] (Pravat, 2020b). They have been sharing important documents with the group members and creating online local repository also. Students are advised to submit the scanned copies of the assignments to the institution through email. Institutions have also started receiving internship reports and projects through email during the lockdown for COVID 19.

Mixed impact on Academic research & Professional Development: COVID 19 has both negative and positive impacts on research. If we take the negative side, it has made impossible for researchers to travel and work together with others nationally and internationally. Some joint research work or project work are made complicated to complete. Some scientific laboratory testing/research work could not be conducted. If we look at the positive side, academicians got much time to improve their theoretical research work. Academicians got acquainted with technological methods and improved their research. Webinars and e-conferences became normal methods for sharing expertise among students and academicians around the globe with similar issues. They could get much time to concentrate on professional development by doing research and to improve knowledge by sharing ideas through webinars and e-conferences. They enhanced their technical skill and could get the scope for publishing articles in journals, publishing books in this free time.

Severely affected the educational assessment system: Most of the external examinations have been delayed & almost every inner evaluations have been suspended which has pessimistic effect on students' learning. Many institutions have been managing the internal assessments through online mode using different digital tools but the postponement of the external assessments, has a direct effect on the education. This uncertainty has created anxiety among students as they are blocked in the same grade/class without promotion. Similarly, many students who had appeared final/board examinations would suffer a lot as by the time they get their certificates, it might be too late for them to apply for the forthcoming academic year in another nations due to lockdown.[9]

Reduced employment opportunities: Many entrance tests job recruitments got cancelled which created negative impact with a great challenge in the life of a student of higher education. The Indians who have been doing their jobs abroad became upset of their job withdrawal also. In India, there is no recruitment in Govt. sector and fresh graduates are in pressure of fearing of unemployment from corporate sectors due to pandemic condition. Many students may lose their jobs from India and overseas. The pass out students may not get their job outside India due to various restrictions caused by COVID 19 . All these facts imply towards increase of unemployment rate due to this pandemic. With increase of unemployment situation, the interest for education may gradually decrease as people struggle for food rather than education [8]

3. Emerging approaches of India for Higher Education during COVID 19

Many challenges are created by COVID 19 . The HEIs have responded positively and adopted various strategies to face the crisis during the pandemic. The Government of India has also taken number of preventive measures to prevent spread of pandemic COVID 19. [10][11] The MHRD and University Grants Commission (UGC) have made several arrangements by launching of many virtual platforms with online depositories, e-books and other online teaching/learning materials, educational channels through Direct to Home TV, Radios for students to continue their learning. During lockdown, students are using popular social media tools like WhatsApp, Zoom, Google meet, Telegram, Youtube live, Facebook live etc. for online teaching learning system. ICT initiative of MHRD (e-Broucher- <https://mhrd.gov.in/ict-initiatives>) is also a unique platform which combines all digital resources for online education [7]. UGC has released Guidelines on Examinations and Academic calendar in view of COVID-19 pandemic and subsequent lockdown on 29th April, 2020 (UGC notice). [12] All terminal examinations have been postponed and shifted to July 2020 and suggested commencement of classes from August 2020.[10] UGC has also prepared complete calendar for the academic session 2020-2021 with new dates keeping in view of the lockdown. Some of the digital initiatives of UGC & MHRD for higher education during COVID 19 are pointed as below[18]:

e-GyanKosh (<http://egyankosh.ac.in/>) is a National Digital Repository to store & offer the digital learning assets which is created by the Open & Distance Learning Institutions of our nation. The things in eGyanKosh are secured by copyright, with all rights held by Indira Gandhi National Open University (IGNOU).

Gyandarshan (<http://www.ignouonline.ac.in/gyandarshan/>) is a web-based TV channel devoted to educational and developmental needs for Open and Distance Learner. A web-based TV channel devoted to educational and developmental needs of the society

Gyandhara (<http://ignouonline.ac.in/Gyandhara/>) is an internet audio counseling service offered by IGNOU [7][16]. It is a web radio where students can listen to the live discussions by the teachers and experts on the topic of the day and interact with them through telephone, e-mail (gyandhara@ignou.ac.in) and through chat mode.[9]

Swayam provides Massive Open Online Courses (MOOCs) with 140 universities approved credit transfer feature. Swayam Prabha provides high quality educational programs through 32 DTH channels transmitting educational contents. e-PG Pathshala (<https://epgp.inflibnet.ac.in/>) is for postgraduate students. Postgraduate students can access this platform for e-books, online courses and study materials. The details of these three digital plat forms are described by the author in the previous paper [8]

e-Adhyayan (e-Books) is a platform that provides 700+ e-Books for the Post-Graduate courses. All the e-Books are derived from e-PG Pathshala courses. It also facilitates play-list of video content.

e-Pathya. (Offline Access) is one the verticals of e-PG Pathshala which is programming driven course/content bundle that encourages understudies seeking after advanced education (PG level) in distance learning just as grounds learning mode. It additionally encourages disconnected admittance.

National Digital Library of India (NDLI) (<https://ndl.iitkgp.ac.in/>) is an archive of e-content on numerous controls for a wide range of clients like understudies (all things considered), educators, analysts, curators, library clients, experts, in an unexpected way abled clients and all other deep rooted students. It is being created at Indian Institute of Technology Kharagpur. It is intended to assist understudies with getting ready for entrance and serious assessments, to empower individuals to take in and plan from best practices from everywhere the world and to encourage analysts to perform between connected investigation from various sources. It is a virtual vault of learning assets with a solitary window search office. It is also available to access through mobile apps.

e-Yantra (<https://www.e-yantra.org/>) provides hands on experience on embedded systems. It has about 380 Lab and made 2300+ colleges benefited.

FOSSEE (<https://fossee.in/>) is short form for Free/Libre and Open Source Software for Education, which is developed to promote open source software for education as well as professional use.

Virtual Labs (<http://www.vlab.co.in/>) has created web-empowered educational plan based tests intended for far off activity. It has more than 100 Virtual Labs comprising of around 700+ web-empowered tests which are intended for distant activity. It gives far off admittance to Labs in different orders of Science & Engineering. These Virtual Labs takes into account understudies at the undergrad level, post graduate level just as to explore researchers.

e-ShodhSindhu (<https://ess.inflibnet.ac.in/>) is an assortment of e-diaries, e-diary files and digital books on long haul access premise. It has 10,000+ e-diaries, 31,35,000+ digital books. It gives admittance to subjective electronic assets including full-text, bibliographic & real information bases to scholastic organizations at a lower pace of membership.

Shodhganga (<https://ess.inflibnet.ac.in/>) is a phase for research understudies to store their Ph.D. speculations & make it available to the entire scholastic organization in open access framework. The scientists can get, list, store, spread and protect Electronic Theses and Dissertations introduced by the analysts.

VIDWAN(<https://vidwan.inflibnet.ac.in/>) is a head information base & public examination network which has profiles of researchers/analysts and other employees working at driving scholarly establishments and other Research and Development associations in India

National Educational Alliance for Technology (NEAT)(<https://neat.aicte-india.org/>) is an initiative for skilling of learners in latest technologies through a Public-Private partnership model between the Government (through its implementing agency AICTE) and the Education Technology companies of India. It brings the best technological products in education pedagogy on a single platform for the convenience of learners.

SAKSHAT (<https://sakshat.ac.in/>) is one Stop Educational gateway for communicating all the education & knowledge associated requirements of students, scholars, teachers & lifelong pupils. The gateway provides the latest news, press releases, achievements etc related to Ministry of HRD[10]. So one can visit SAKSHAT to know the world of online learning.

4. Post COVID 19 Trends of Higher Education

Change is inevitable which has been forced upon the society due to COVID 19. The opportunities created by the pandemic COVID 19 will lead towards a better tomorrow. Tomorrow will be a new morning which will entirely be in our own hands. New technologies will certainly challenge the traditional paradigms such as classroom lectures, modes of learning and modes of assessment. The new trends will allow the education sector to imagine new ways of teaching learning and some trends may be pointed as below.[18]

1. **May encourage personalised learning:** Learning may not be confined to classes or to any specific boundaries. Students may be the virtual learners with one teacher leading dozens of students in the new age. The learning modules may be modified to suit different learning styles and the learning contents may come from different sources to meet the learners' aspirations and needs. Students may pursue their learning in the new paradigm as per their choice.
2. **Student Attendance may slow down:** Many parents may be reluctant to send back their children to schools/colleges suddenly after the end of lockdown. Some poor family parents who have lost their livelihood during the pandemic may not be able to afford the expenditure to send their children to institutions. This may lead to home education for another few months.
3. **National and International student mobility for higher study may be reduced:** Student safety and well-being issues are important deciding factors for students and their parents for movement to international institutions for higher study. The fresh method of social distancing will carry on for quite some time & can affect on-campus one on one teaching learning. The majority of the parents will choose to find workable options closer to their home and may restrict for less movement within the country due to the pandemic. The international education has also been affected by the crisis. Many international universities have been closed and are delivering all educational activities online. Many international conferences in higher education have been cancelled or turned into a series of webinars. So, the national and international student movement may be diminished.
4. **Learning with social distancing may continue.** All will maintain social distancing and avoid warm handshake, hug, personal greeting, and intimacy for a long time. Invisible restrictions may constraint the fun & joy of campus life. Sports, Gyms, tournaments may be in low gear for a longer period resulting less physical activities of students.
5. **Educational institutions may run with different shifts per day.** The necessitate for societal distancing may imply less students in every division. So, most of the educational institutions may work in different shifts per day which may put further pressure on the teaching & organizational employees of the institution to manage.
6. **May raise the gap between privileged and unprivileged students** and required technical gadgets for online learning. It will widen the gap between privileged and unprivileged learners creating inequality.
7. **Teaching learning may run with technology.** More and more students will depend on technology and digital solutions for teaching learning, entertainment and connecting themselves with the outside world. Students will aid internet facility to communicate virtually with their teachers & fellow learners through E-mail, WhatsApp, Videoconference, Instant message, webinar or any other tool.

8. **Assessment system may be changed to new shape.** Artificial Intelligence (AI) may help teachers to deal with assessment, evaluation, preparing score cards & monitoring the performance of each student easily. AI may use digital platform extensively to reduce burden of examiner in handling examination and evaluation systems. If these activities are made simpler, the academicians would be able to concentrate more on course development, qualitative teaching-learning and skill development.
9. **Demand for Open & Distance Learning (ODL) and online learning may grow.** COVID 19 has enforced the human being society to preserve social distancing. It has produced more summons to carry on teaching learning by preserving social distancing. To meet these summons there is more demand for ODL & online method of education & the same trend may continue in future also.
10. **Blended learning may take the leading role.** Blended learning combines both face to face and online learning modes. COVID 19 has accelerated adoption of digital technologies to deliver education and encouraged the educational institutions to move towards blended mode of learning. All teachers and students became more technology savvy. The traditional face to face mode with post COVID 19 technology mode will lead the education towards blended mode of teaching learning and it may transform the structure of the education system.
11. **Student debt crisis may rise.** In India, lots of students or their parents take education loans for higher education. If the employment market does not pick up, student debt crises may rise and create serious issue. Students may face increased stress, anxiety and depression due to their student loans.
12. **Unemployment rate is expected to be increased.** There is no recruitment in Govt. sector and fresh graduates fear withdrawal of their job offers from private sectors due to the pandemic COVID 19 [8] (Pravat, 2020b). Many Indians might have returned home after losing their jobs overseas due to COVID 19. Hence, the fresh students who are likely to enter the job market shortly may face difficulty in getting suitable employment.

5. Impact of COVID-19 on Education System

In order to control the spread of the novel coronavirus, state governments started the closure of schools and colleges across the country. It was somewhere announced in the second week of March as a temporary measure to avoid the crowd. Initially, for a month closure of schools was announced by the government but gradually the time of closure was extended and it is uncertain when they will reopen. During this period, there are various activities take place which are very crucial such as competitive exams and entrance tests of various universities, board examination and semester examinations in universities, nursery school admissions as well as admission process in universities. In order to stop the outbreak of COVID-19, no immediate solution is found out. In India, the closure of school and university will not only have a short-term impact on the continuity of learning of young learners but it will have a large effect on the economic growth of the country as well as having large effect on the society[17].

6. Impact of COVID-19 on Schools

In order to raise the skills, best public policy tool available is going to school. School is a place where children can have fun and raise social awareness and social skills. The main motive of going school or being in school is that it enhances the ability of the child. Spending a relatively short period of time in school increases skills and ability. On the other side missing the school or not attending the school will have negative effect on the skill growth. The closure of the schools has affected the structure of learning and schooling. Firstly, it affected the teaching and assessment methodologies. Online teaching methods are adopted by the few private schools that are handful in taking online classes. In those schools children are taking classes online. On the other side low-income private and government schools have complete closure and not having the access to e-learning solution. It is disrupting the learning of students. Parents are facing various issues because of the change in teaching methodology[17].

7. Impacts COVID-19 on online classes on Parents

In order to maintain the attendance or not missing out too much, children are forced to continue their education at home and generally have not been sent out from the home to play.[13] Bjorklund and Salvanes (2011) described that major inputs into a child's learning is provided by the families as these are treated as a central to education. Parents

are facing issues in understanding the new methodology of teaching. Some parents are not very techno friendly. Thus, they are not able to guide their ward to take classes online. Connectivity of internet is also a big challenge in front of all teachers, students and parents. Many disturbances have to face due to the poor connectivity[13][17].

8. Assessments

The teaching for students is not only interrupted by the closure of schools, colleges and universities. Lockdown also affected the assessment of the students all around the world. Many exams and assessments have been cancelled or postponed because of the closure of educational institutions. For both students and teachers, this is a new era of the education. Many colleges and universities have shifted their traditional classes system to the online classes as well as the examination system also has been shifted from offline to online. They are using online assessment tools for evaluation. Online assessment tools are not free from the limitations. There are various errors related to the measurement are reported in online assessment tools in comparison to the usual measurement.[14]Piopiunik et al. (2020) showed in their research that educational credentials are used by the employers to assess the applicants such as grade point averages and degree classifications to sort applicants. Thus, the lockdown is also affecting the placement of the new graduates on labour market. Matching efficiency of the new graduates is reducing due to the increment in the disruptions in the signals of the applicants which is leading higher job separation rates and slower earning growth. According to [15] Fredriksson and Ihlen (2018), this is costly both to the individual and also to society as a whole.[17]

9. Conclusion

The closure of schools, colleges and universities is interrupting the learning of students and also disrupting the internal assessment and public assessments for qualifications. The traditional method of teaching has been replaced by the online teaching. One side online teaching is providing opportunity to the students for learning another side there are various issues are attached with the new methodology of teaching. Education institutions are searching the ways to solve the issues which arose due to the lockdown and putting their efforts to fill the loss of learning. In order to rebuild the loss in learning at the time when they will be reopened, schools need resources. There are many questions in front of the schools such as how to target the children and how to utilize these resources etc. need to be solved. The internal assessment of the students related to the learning should not be skipped. It should be postponed. In order to avoid the longer unemployment period for new graduates, new policies should be formed to support them in their entry to the labour market [17]. Virtual education is the most preferred mode of education at this time of crisis due to the outbreak of COVID 19. The post COVID 19 education seems to be an education with widely accepted online/virtual education which may perhaps be a parallel system of education. This paper has not covered any statistical analysis on higher education however further in-depth study with statistical research may also be undertaken.

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