

IMPACT OF COVID-19 IN THE EDUCATION SYSTEMS

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Received: 30 April 2022, Revised and Accepted: 16 April 2022

ABSTRACT

The COVID-19 pandemic has wreaked havoc on education systems around the world, affecting approximately 1.7 billion students in over 200 nations. More than 95% of the world's student population has been touched by school, institution, and other learning facility closures. This has resulted in significant changes in every part of our life. Traditional educational techniques have been considerably disrupted by social alienation and limited movement policies. The reopening of schools once the restrictions have been lifted is another challenge, as many new standard operating procedures have been implemented. Many scholars have shared their work on teaching and learning in various ways in the aftermath of the COVID-19 outbreak. Face-to-face instruction has been phased out at a number of schools, colleges, and universities. There is concern that the 2020 academic year, or maybe more in the future, would be lost. Innovation and implementation of alternative educational systems and assessment methodologies are urgently needed. The COVID-19 epidemic has given us the opportunity to lay the groundwork for digital learning. The purpose of this article is to present a complete assessment on the influence of the COVID-19 epidemic on online teaching and learning of various papers, as well as to suggest a course of action and future aspects.

Keywords: COVID-19, Pandemic, Restriction, Teaching, Future, Students.

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INTRODUCTION

The COVID-19 causes great concern to the education systems in India and many other countries. Pharmacy education and institutions are seriously affected due to nationwide lockdown, closure of colleges and universities, and suspension of face-to-face activities. Its fear is giving sleepless nights to students who were to appear in their regular classes, annual/semester examinations as well as entrance or competitive examinations, interviews, GD, PI for campus selection, etc. with COVID-19 spreading to large parts of India in March 2020, the central and state legislatures shut down schools, universities, and instructive establishments as a prudent estimating against the illness. COVID/COVID-19 has been proclaimed as Pandemic by the World Health Organization (WHO) and there is a feeling of dread and frenzy from one side of the planet to the other. Some 1.3–1.5 billion understudies and youth across the planet are impacted by school, college, and furthermore college terminations. These cross country terminations are affecting more than 72% of the world's understudy populace.

Lockdown 5.0, which comes into effect on June 1, 2020, India has registered that the total number of cases in the country is 188,883, according to Union Ministry data, of this, 93,322 are active cases, as many as 5,394 deaths and while 91,818 people have been cured/discharged. Since the main instance of COVID-19 has arisen in India, state legislatures are making every one of the conceivable preparatory strides to check the spread of the sickness and that incorporate closing down instructive establishments, abandoning lodgings, deferring selection tests, meeting services, and more [1].

Beside these, the COVID-19 pandemic has made a rapidly changing world with more and more online activities, impelled into more current and more up to date circles by science and innovation, yet by fresher political real factors, financial change, and the rise of more current freedoms, more up to date desires and fresher ways of life.

SUSPENSION OF FACE-TO-FACE ACTIVITIES AND RESCHEDULING OF ACADEMIC CALENDAR

As the pandemic spreads, which seems inevitable, all most all countries followed mandatory measures to suspend face-to-face activities for all educational institutions such as classroom teaching, examination, and practical classes, where close gatherings are required. Nobody knows without a doubt how long these terminations are probably going to endure. Beginning measures taken by numerous state run administrations have gone from 15 to 30 days, yet one can easily anticipate that they will be extended until the pandemic subsides. It is not preposterous to envision situations, where the present circumstance can most recent 2 months or more, or as in the case of Spain and Italy, where the decision was announced not to resume face-to-face classes for the rest of the academic course which normally ends in June [2].

In India, the examination authorities rescheduled their examinations and academic calendar due to lockdown for COVID-19. Few such decisions are mentioned below [3]:

May 8, 2020, all India Council for Technical Education (AICTE) sent off "CovidGyan" as of late to assist individuals with managing the test of data over-burden on the novel COVID. May 6, 2020, Ministry of Human Resource Development (MHRD) uncovered that reviewing in school and University tests could be a composite of half stamps in the event that the COVID-19 circumstance does not seem, by all accounts, to be typical. For the forthcoming CBSE tenth and CBSE 12th tests, the HRD Minister declared that the CBSE is chipping away at to decrease the prospectus for the new scholarly meeting.

Government think-tank NITI Aayog has declared that it has suspended its temporary job program for the following 3 months, beginning from May, in wake of the continuous COVID episode in the country.

The AICTE has delivered a modified scholastic schedule for specialized organizations. The designing advising for confirmation for allocation of seats to be finished at the latest August 15, 2020.

May 4, 2020, AICTE delivered a point by point set of rules and a patched up scholastic schedule for the Indian Technical Education Institutes to follow. Service of Human Resource and Development declared the elective scholastic schedule for classes 9 and 10 delivered by the NCERT.

May 3, 2020, the MHRD declared the new dates for the JEE Main 2020 April Examination and National Eligibility and Entrance Test (NEET 2020 tests) on May 5.

AICTE sent off 49 e-learning courses for no cost. In the midst of closed scholastic institutions, deferred tests and postponed outcomes, AICTE e-learning courses won't just forestall scholastic loss of understudies which, however, will likewise assist understudies with using the COVID-19 lockdown period viably by updating their skills.

The University Grants Commission delivered the rules for leading the forthcoming yearly assessments and scholastic schedule for varsities the country over soon. Pharmacy schools are no exception, as numerous organizations have been shut, making educators, and understudies search out creative ways of finishing their coursework for the semester.

IMPACT OF COVID-19 AND EFFECT OF LOCKDOWN

The choice to briefly close instructive establishments were provoked by the rule that large gatherings of students, teachers, and non-teaching persons constitute a serious risk to safeguarding public health during the pandemic. Pharmacy institution and indeed all educational institutions tend to close their doors in situations, where some form of confinement or quarantine has been legislated.

For the students, the most quick effect has normally been that the brief cessation of face-to-face teaching at colleges has left them, in a completely new situation, without an unmistakable thought of how long it will keep going, quick effect on day to day existence, costs caused and monetary weight and, obviously, learning coherence, public, and worldwide versatility for training.

Students have had to rearrange their daily lives to adjust to a situation of confinement. The greater part of the students, who were displaced a long way from their families, yet inside a similar country, have returned home. However, in the case of students abroad, the situation remains highly variable, with 10,000 stranded in destination places waiting for on-site activities to resume or because they are unable to return to their home due to closure of airports and borders. Unavoidably, the deficiency of social contact and socialization schedules that are essential for the everyday experience for a higher education student will take its toll. The isolation associated with confinement will have effects on socio-emotional balance. A survey in the United States shows, that 75% students have experienced anxiety and depression as a result of the crisis.

Another consideration is if, if the stoppage of face-to-face activity is extended to the equivalent of one academic term or even longer, there will be a problem for those seeking promotion to a higher class or those wishing to pursue higher education. If so, the implications in terms of financial burdens for those students who have loans or credits will affect them and their families. Even they have to bear extra costs associated with their higher education.

Teachers are also affected significantly at the workplace and professionally. First, the fact that not all pharmacy colleges have strategies for the teaching continuity activity which must be taken into account, and in this instance, temporary contracts may be terminated. The most evident impact on teachers is that they continue to teach using the virtual modality, in which they are not trained and habituated. In theory, at least, virtual education is present in most large institutions, but it is difficult to find one that does not have a virtual campus and a virtual classroom for each subject.

Non-teaching staff constitute the most vulnerable sector in terms of the possible reduction in the number of jobs that private colleges and

universities, for example, would have to effect in the face of possible financial curtailment due to the cancellation of fees or reduction in student enrolment. Pharmacy institutions will face huge disruption of their functioning due to temporary cessation of the physical activities. The impact of this disruption is highly variable and depends on their ability to remain active in their academic activities and on their financial sustainability. This implies that many institutions would face serious financial difficulties. Fees collection may not be enough, creating cash flow problems and perhaps even financial survival, particularly in the case of private colleges and universities. This can be especially critical for small or medium-sized private institutions that cannot guarantee continuity of training in virtual mode. In these cases, if the situation continues, it is very likely that, failing to offer teaching, they will have to temporarily suspend the collection of fees. In such a context, it is also possible that larger private colleges attempt to capture these orphaned students. In this scenario, many institutions may need to close.

THE SUBSTITUTE FOR FACE-TO-FACE CLASSES

In the wake of this emergency situation of COVID-19, instructive organizations all over the planet are moving their showing related activities to online mode. Top educational foundations of India have temporarily suspended their offline operations and have shifted to their teaching-learning procedure online.

The choice for online activities requires strong internet connectivity in common households. The percentage of households with an internet connection and mobile lines per 100 inhabitants is comparatively low in India, about 50%, whereas Europe 86.5% and America provide 71.8%; individuals using the internet in Asia 48.4%, Europe 82.5%, and America 77.2% [4].

The physical facilities required for online classes are a functioning computer, a good internet connection, videoconferencing software, a microphone, and a webcam. A desktop or a laptop any computer, even a smart phone will do the job of online classes, but it should be in good condition. A strong internet connection can make smooth conversation with teacher, making the exchanges easier and so the learning process. For this reason, 5 MB data is necessary. A video conference software should contain all the necessary gear to take lessons on the internet such as video, chat, text editor, excel sheet, digital board, share screen option, and different views anything needed for a quality class. Top free Video Conferencing Softwares used currently are Zoom, UberConference, Google Hangouts Meet, Cisco Webex Meetings, RingCentral Meetings, Skype, GoToMeeting, Pexip, ezTalks Meetings, etc.

The change of medium and long-term teaching and learning modalities may have an impact for students. If the traditional dynamics are reproduced through technological means, then effects should not be very significant because the return to the classroom will be experienced as a return to normality, particularly when formulas for consistent assessment of web-based learning have been arranged.

Another effect on students studying abroad is that many students will resign to continue their studies and academic stays interrupted by psychological affectations, epidemiological restrictions, visas conditions, as well as for economic reasons since the support funds have also been decreased or cancelled.

Of course, this awkward development has set out some great learning open doors for understudies – how to adopt the new procedure of online systems, how to communicate, how to be flexible, and creative and innovative in the face of adversity. The pandemic is constraining instructors to search out creative answers for help understudies as they are expected to rapidly give assistance on the fight with COVID-19 [5,6].

TRADITIONAL EDUCATION SYSTEM TO ONLINE CLASSES, E-LEARNING, M-LEARNING (MOBILE), ONLINE EXAMS, ETC.

Main educational methodologies used in the past and present and predicted for future are mentioned below:

- Phase-1, that is, Early system. (Gurukul, home schooling, and primary methods of teaching, where books, blackboards, etc., are less used by the teacher as a teaching aid and teachers mainly play the key role with face-to-face oral instructions)
- Phase-2: Middle phase (traditional classroom teaching, college, or university systems providing education on mass scale with the teacher as the knowledge provider and the student as the passive recipient, which is physical or face-to-face teaching)
- Phase-3: Modern classroom education, where the classrooms are equipped with whiteboards, projectors, or audio-visual display equipment and digital boards. It is now the transition phases, that is, chalk and talk to computer based multimedia supported teaching with use of computers and internet which helped in increasing access and equity
- Phase-4: Future system will include online education or smart method of teaching and e-learning using high-speed internet, mobile technology, social media platforms, videoconference, etc., facilitating personalized learning anytime anywhere and redefining the role of teachers as sensitizer, facilitators, or mentors.

Online education, in which data innovations and correspondences are used to aid in the turn of events and the acquisition of information from various far-flung locations. It uses video/sound and text correspondence and programming over the internet to create a learning environment. There are various kinds of online learning: Knowledge base, online support, asynchronous, synchronous, and hybrid training which are all options [4].

A knowledgebase is a set of courses that are published on a website and include general learning instructions that a learner must complete without any assistance. Online support type is a modified version of the knowledge base, where the support is available so there is a discussion board, web forum, or another communication way available to get support on some topics. A knowledge-base is a set of courses that are published on a website and include general learning instructions that a learner must complete without any assistance. Synchronous training is done in real-time with a live instructor and optional moderator. Participants can communicate directly with the teacher and other group members at a pre-determined time when they log into the online education environment. Hybrid training combines online and face-to-face interaction. Webinar, videoconferencing, etc., are included in this system.

At present, we are in a state of a massive transformation from Phase-3 to Phase-4, where the focus is on student's learning outcomes. Online classes, video conferences, Emails, WhatsApp, etc., are the major methods of teaching and learning. The primary focus areas of delivery are employability, marketing, student engagement in the latest knowledge in pharmacy practice area and experience in disease management, availability of quality medicines, research excellence, and society including industry responsibility.

In a circumstance, where the students are not permitted to go to class, the alternative is to move from traditional to online education. In this case, the essential parts are the internet coverage, availability of computers, or smart phones in the population. The number of computers owned by families is lower than 50%, especially in rural areas of the country, which can have a negative impact on online education. However, modern smart phones can be used as a substitute in some cases if the educational platform is mobile friendly or has mobile applications available. Different countries worldwide have introduced various solutions during the pandemic to proceed with the instruction cycle. Online libraries, TV communications, rules, assets, video addresses, and online direct were presented in something like 96 nations. To increase the coverage of the syllabus to the student population, the live transmission of lessons is broadcasted through the TV channel in different subjects.

The COVID-19 has resulted in the particular ascent of e-learning, by which instructing is attempted from a distance and on advanced stages.

With this unanticipated change away from the study hall in many parts of the world, some are unsure whether internet learning would survive the epidemic, and what such a shift would mean for the whole training market.

Indeed, even before COVID-19, there was at that point high development and reception in training innovation, with worldwide speculations arriving at US\$18.66 billion of every 2019 and the general market for online instruction projected to reach \$350 Billion by 2025. Since COVID-19, there has been a major surge in use of language applications, virtual mentorship, video conferencing equipment, and web-based learning programming [7].

TRENDS OF EDUCATION IN POST COVID-19 ERA [8]

Closure of educational establishment's horrendous affects society, and on this couple of UNESCO, perceptions are referenced mentioned below:

- Interfered with realizing: When schools close, kids and youth are denied chances for development and advancement. The drawbacks are lopsided for under-special students who will more often than not have less instructive freedoms past school
- Uncertainty and stress for educators: When schools close, particularly startlingly and for obscure terms, instructors are frequently uncertain of their commitments and how to keep up with associations with understudies to help in learning. Changes to remove learning stages will more often than not be muddled and baffling, even in the best conditions
- Challenges for creating, maintaining, and improving distance learning: Demand for distance learning skyrockets when schools and colleges close and often overwhelms existing portals to remote education. Moving learning from classrooms to homes at scale and in a timely manner poses significant human and technical obstacles
- Keeping up with, and further developing distance learning: Demand for distance learning skyrockets when schools and universities close and regularly overpowers existing entrances too far off instruction. Moving gaining from study halls to homes at scale and in a rush presents tremendous difficulties, both human and specialized, colleges and universities close down, early relationships increment, more youngsters are enlisted into civilian armies, sexual double-dealing of young ladies and young ladies rises, teen pregnancies become more normal, and kid work develops
- Social disengagement: Institutions are centers of social movement and human communication. At the point when these nearby, numerous young men and young ladies pass up friendly contact that is vital for learning and advancement
- Challenges estimating and approving learning: Calendared evaluations, prominently high-stakes assessments that decide affirmation or progression to new schooling levels and organizations, are tossed into chaos when institutions close. Techniques to delay, skip, or regulate assessments a ways off raise genuine worries about reasonableness, particularly when admittance to learning becomes variable. Disturbances to appraisals might bring about pressure for understudies and their families and can trigger withdrawal.

Webinars and virtual classes are new trend in different education institutes. Colleges have been shut or potentially are conveying all instruction on the web. Each global gathering in advanced education has been dropped or transformed into a progression of online courses. As states are beginning to return to society and restart business, colleges will likewise slowly resume their virtual grounds.

Social separating, practically have no games. The clench hand knock, the high-five, the warm handshake, the embrace will be away for quite a while. The individual hello, the grin, the closeness have all been deducted from the class of tomorrow. The class will transition from sociable to asocial behavior: Companionships, person to person communication, grounds holding, and groups will be waiting for some

time. Imperceptible dividers will come up, weakening in numerous ways the fun and elation of grounds life.

Sports also will be in at low for some time. Centers, pools, possibly tracks, and fields will stay shut for at some point more. Furthermore when they do open, cutthroat games and competitions will take significantly longer to be restored. Social distance may lead to some getting "socially distant." Rank/Caste/family foundation, societal position, financial prosperity, and the sort of school you went to have perpetually formed the student certainty to make some noise in class. The oppressed would no doubt forever be the mild participants who might feel reluctant to offer something wrong in class, thus would incline toward quietness over interest. The study hall, with equivalent seating, with uniform seats, sort of carried an inferred vote based system to educating. Innovation which permits one understand to get to class from a cooled, greetings speed Wi-Fi home, while another might be attempting to observe a peaceful corner in a stuffed apartment with anxious web will assist 'socially distance' the class. Presently, that is without a doubt not what was expected from social separating.

The job of the instructor or teacher will get re-imagined. The thought of an instructor or a teacher as the information holder who bestows intelligence to understudies is not generally fit with the end goal of things to come. With students having the option to get sufficiently close to information, and even acquire numerous a specialized expertise, through a couple of snaps on their telephones, tablets, and PCs, we should rethink the job of the educator in the homeroom of tomorrow. This might imply that the job of educators should move toward working with youngsters' improvement as contributing (and employable) citizenry, rather than simply addressing.

ARTIFICIAL INTELLIGENCE (AI) AND CLOUD COMPUTING WILL EMPOWER MONSTROUS OPEN WEB-BASED COURSES (MOOC)

MOOC – engage students and teachers in distant regions to learn and outfit themselves with the most recent information. AI and AI will be utilized to diagram students' qualities and inadequacies. Individual learning rates and records will be examined and registered. These tests planned to help students' trust in zones that they surpass assumptions in and challenge them in areas that they do not will become all-encompassing approaches to empower understudies to remain supported and persuaded.

Examination and grading will undergo a change. Teachers will have less tedium dealing with assessment, evaluating, paper setup, making mark-sheets, and tracking each student's success and all due to the AI. They will be able to focus more on course improvement, teaching quality, and aptitude development if these activities are simplified. AI frameworks will also move examinations, and scoring systems, to go increasingly digital with the role, and discretion, of the examiner reducing.

The worldwide college-based leader training market was worth near \$2bn in 2019. However, this has come to a halt in 2020. Wharton Executive Education is perhaps the biggest supplier of face-to-face and online leader instruction on the planet. A greater number of leaders decide to learn with Wharton than some other first class business college on the planet, with as much as 12,000 going to programs face-to-face and north of 50,000 finishing on the web authentication courses in 2019. The decrease in business brought about by COVID at Wharton has been huge, however has been to some extent offset by an increase in internet based enrolments and by changing over some face-to-face programs into online courses [7].

RESET EDUCATION SYSTEM IN THE ERA OF COVID-19

More than a billion kids have been affected by school closures since the COVID-19 pandemic began, and 272 billion days of study have been lost or disturbed.

The pandemic has worsened existing educational inequities; radical inclusion should be the new normal. During the epidemic, the

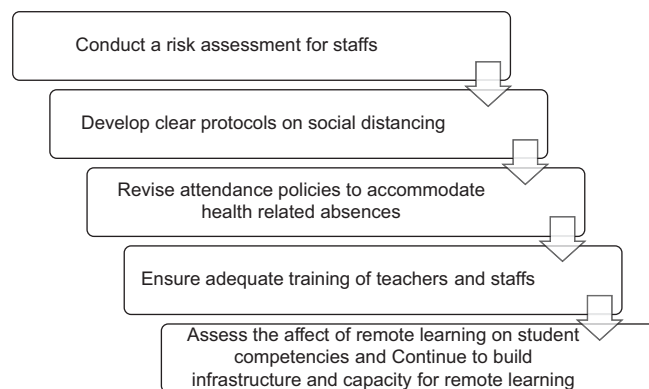


Fig. 1: Reopening steps of institutional sectors

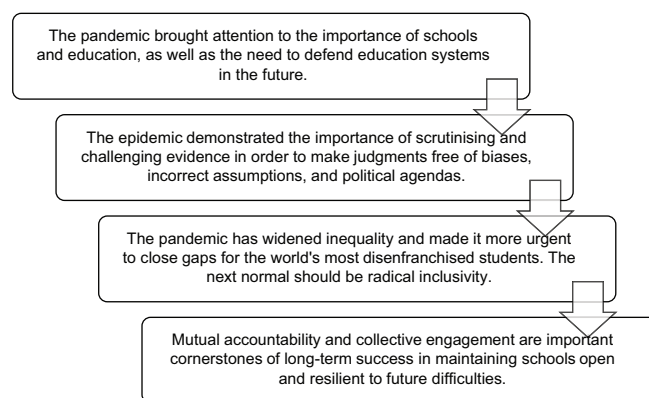


Fig. 2: Future scope of education system in the era of COVID-19

systematic gathering and analysis of data related to education served as a paradigm for the future, ensuring that evidence-based decision-making and policy-making in education are free of political agendas [9].

CONCLUSION

There will be a change and will be changed in the field of instruction and learning in the months and a long time to come. Same things will occur in our society. Yet, one thing is without a doubt that we can't return to the pre-crisis period that is currently behind us. We should relinquish the schedule as it existed previously; we should to some degree re-gain proficiency with the "typical/expected" request of homeroom educating; we should re-evaluate contact hours; we should return to the thought of everybody doing likewise; we will have to accept the change in the education, teaching and learning patterns; and we will also have to accept the change in the society, economy reformation with online activities. Rather, we have to think about how quickly we can overcome the loss and damage caused by COVID-19, and improve in the near future.

Tomorrow will be a new dawn. It is totally on our own hand to decide what we will do entirely. Change is both desired and unavoidable. In truth, we have been compelled to change. If we take advantage of the chance or let it pass us by will determine whether the future will shock us or whether we will develop shock-absorbers that will use the impact to cushion us on our path to a better tomorrow.

FUTURE SCOPE [9]

The pandemic brought attention to the importance of schools and education, as well as the need to defend education systems in the future. The epidemic demonstrated the importance of scrutinising and challenging evidence in order to make judgments free of biases, incorrect assumptions, and political agendas. The pandemic has widened inequality and made it more urgent to close gaps for the world's most disenfranchised students. The next normal should be

radical inclusivity. Mutual accountability and collective engagement are important cornerstones of long-term success in maintaining schools open and resilient to future difficulties.

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