Impact of the lockdown due to covid-19 on education: A Review

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Abstract
The entire world is currently in lockdown because of Covid -19 pandemic. Every sector of the world is effected and business have adopted ways to work from home. But the situation in the education sector is worse. More than 91/ of world's student are out of school due to closure of educational institution in at least 188 countries. This leads to wide spread job and income loss along with the economic insecurity. The education sector is facing unprecedented challenges and needs to adopt and find solutions to keep children motivated and in their route to learn by use of technologies. On the other hand this pandemic has created oppertunities to explore the ways and possibilities of using open and distance learning by the use of technologies, but at the same time poses many challenges to overcome this problem. This review article is compiled with the objective to have insight of pandemic impact on the educational status.

Keywords: lmpact, lockdown, covid -19, education, pandemic, world, technologies

Introduction
As the COVID-19 has engulfed the entire world and effected all the sectors worldwide, including the education system, leading to the total closer of Schools, Colleges, and Universities. This was done to slow the spread of COVID-19 by following the preventive measures such as social distancing, self isolation etc. [1]. As the previous outbreaks of infection diseases have prompted widespread school closings around the world with varying level of effectiveness [2, 3]. During 1918-1919 influenza pandemic in the United States, school closures and public gathering bans were associated with lower total mortality rates [4]. This was cited that implemented such interventions earlier had greater delay in reaching peak mortality rates [4]. Schools closed for a median period of 4 weeks according to a study of 43 US cities in response to the Spanish flue. Schools closures were shown to reduce morbidity from the Asian flue by 90% during the 1957-58 outbreak [5] and upto 50% in controlling influenza in the US, 2004-08 [6].

During the Swine flue outbreak in 2009 in the UK, in an article titled "Closure of schools during an influenza pandemic" published in the Lancet Infectious Diseases, a group of epidemiologist endorsed the closures of schools in order to interrupt the course of the infection, slow further spread and buy time to research and produced a vaccine [7]. Previous influenza pandemic including of 1918 flu pandemic, the influenza pandemic of 1957 and the 1968 flu pandemic shows that case drop when schools closed and re-emerged when they reopened.

Most countries of the world have closed educational institutions with the aim to reduce the spread of COVID-19. Till 30 September 2020, approximately 1.077 billion learners are currently affected due to closure of educational institution in response to the pandemic. According to the UNICEF monitoring, 53 countries are currently implementing nationwide closures and 27 are implementing local closures, impacting about 61.6% of the world's student population, and schools in 72 countries are currently open [8].

School closures impact not only students, teachers and families [9] but have far reaching economic and societal consequences [10].

School closures in response to the pandemic have shed light on various social and economic issues such as food insecurity, digital learning, student debt and homelessness as well as access to child care, health care housing, internet and disability services. The impact was more severe for disadvantaged children and their families, causing interrupted learining, childcare problem, compromised nutrition and consequent economic cost to families who could not work [11].

The lockdown has forced all the educational institutions to cancel their academics, examinations, entrance examinations, internships etc. and got shifted to the online mode. At the beginning of lockdown there persist confusion among the students and educators how to cope up the with the situation of this sudden crisis that leads to the closure of educational institution almost throughout the world. But with the passage of time, this lockdown taught many lessons, as how to manage such kind of pandemic. As a result COVID-19 pandemic created many challenges, but at the same time open the door of many opportunities for the educational institutions to strengthen their technological knowledge and infrastructure development and wider use of technology [12]. Thus that lockdown give a ray of hope for students and teachers, a ray of hope for the continuation of academic activities by using live video conferencing with the use of different apps like Google meet, Zoom, Facebook, Skype, YouTube, Whatsapp etc. The lockdown has accerlated the use of digital technology.

Consequences of closure of educational institutions
According to united Nations International Children's Fund (UNICEF) the COVID-19 pandemic has affected more than 91% of the students worldwide, with approximately 1.6 billion students are unable to attend the institutions due to closures because of lockdown [13]. In the beginning of lockdown, the closure of educational institution was

temporary, but with the rapid spread of this virus leads to the closure for longer period and it carries high social and economic costs. The disruption they causes effect people, but the impact is more severe for disadvantaged children and their families including interrupted learning, compromised nutrition, childcare problems and consequent economic cost to families who cannot work [14]. This is particularly true for students from disadvantaged backgrounds, who may not have parental support needed to learn on their own. [15]. It is also reported that working parents are more likely to miss work when schools close in order to take care of their children, increasing wages loss in many instances and negatively impacting productivity.

Childcare
In the united States, as of early April, more than half of existing childcare programme had shut down and were not serving any children [16].

School closures put a strain on parents and guardians to provide child care and manage distance learning when children are out of schools. Besides, for working parents often leave children alone during closures of schools and as a result leads to risky behaviour, including increased influence of substance abuse.

Nutrition and Food insecurity
Nutrition plays a critical role in cognitive development and academic performance for children [17]. In developing counntries like India mid-day meal is served to school children upto 8th standard and this initative by the Govt. of India has successfully overcome the malnutrition to same extent. Many students worldwide depends on free or discounted meals at schools. When schools close, nutrition is especially compromised for children in schools where food is provided.

In USA schools lunch programmes are the second biggest anti-hunger imitative after food stamps. Every year, nearly 30 million children rely on schools for free or lowcost meals including breakfast, lunch, snacks and even dinner [18].

Unequal Access to technology and educational Resources
Due to the poor internet network or lack of access to technology create problem for students from rural areas and from disadvantaged families. This lack of technology thus act an obstacle to continued learning. In response to school closures caused by COVID-19, UNESCO recommends the use of distance learning programmes and open educational applications and platforms that can be accessed by schools and teachers and can be used to reach learners remotely and limit the disruption of education [19]. Besides, libraries throughout the world are closed temporarily to aid in slowing the transmission of COVID-19.

Owing to closing of libraries, students as well as teachers can not physically access the text books and material they need to study. Several initatives were taken so that students and teachers can have access to open educational resorces or understand copyright limitation. In this regard international council for open and Distance Education issued a special website to provide webiners tips for online teaching and resources for teachers [20].

In New Zealand a group of publishers agreed to allow for virual public readings of their material from Libraries and classrooms [21]. An advocacy organization in Netherland launched a website to allow teachers use free licensed music

and video for their class [22]. Several organization are also working to explain to teachers how to navigate complex copyright scenarios. The program on Information Justice and Intellectual Property at the American university is holding a set of webinars for different educators to guide them through copyright issues while delivering online teaching, and how to address best practices for fair use [23].

Online Learning
After the lockdown because of COVID-19 pandemic particularly online education has become a critical as institutions seeks to minimize the potential for community transmission. Technology can enable students and teachers to access specilised materials well beyond textbooks in multiple formats and in ways that can bridge time and space [24].

During lockdown institution conducted online classes via zoom, google meet face book, whattsapp etc. Many organization came farward for this noble cause.

Positive impact of covid-19 on education
Although COVID-19 has impacted the every sector of the world including the education sector also. By this impact educational institutions are trying their best to provide seamless support services to the studdents during this unfavourable pandemic situation. This pandemic provide an opportunity for transformation and improvement from traditional system to the modern system. Some of the important points are discussed as under:

Rise in use of learning Management System
The companies across the world got great opportunities for developing and strengthing management system for use by the educational institutions. With the imposition of lockdown and closures of educational institution, use learning management system become a great demand.

World Wide Exposure: This lockdown open the oppurtunites for the academicians, students and scholars, scientist to interact with peers around the world and share their experience and academic works.

Blended Learning
COVID-19 has accerlated the use of digital technologies to cope up the loss during this pandemic and to deliver education. The educational institution moved towards the blended mode of learning. It encouraged all the teachers and students to use the technology for the delivery of education to the students. As a result new ways for delivery and assessment of learing opened immense opportunities for major transformation in padagogy and curriculum development.

Enhancement in use of electronic media for sharing information
The use of various electronic media platforms by the students, teachers and others became more common during pandemic.

The raised quaries were resolved either through Emails, SMS, Phone calls face book, whtatsapp etc. Besides students are also able to manage their times more efficiently in online education during pandemic.

Enhanced Digital literacy
The pandemic induces people to learn and use of digital

technology and that result in increase in digital literacy. As hard copies were not accessed by the students during the lockdown and therefore most of the students used soft copies material for study as well as for references.

Rise in online/virtual meetings
The pandemic situation has created a massive rise in webinars, teleconferencings virtual meetings and e-conferencing. This all takes to collaborative work and collaborative teaching and learning can take to new forms.

Demand for open and Distance Learning
The students during the pandemic situation opted/preferred open distance learning as it provide oppertunities to the learners from diverse resources and custamized learning as per their needs.

UNESCO Recommendation
Priortize solutions to address psychosocial challenges before teaching
It is important to mobilize available tools to connect schools, parents, teachers and students with each other.
Create communities to ensure regular human interactions, enable social caring mesures and address possible psychosocial challenges that sutdents may face when they are isolated.

Examine the readiness and choose the most relevant tools
It is pertinent to decide on the use of high technology and low technology solutions based on the reliability of local power supplies, internet connectivity, and digital skills of teacher, and students. It could range through integrated digital learning platforms, video lessons, Moocs, to broadcasting through radios and Tvs.

Protect data Privacy and data security
Assess date security when uploading data or educational resources to web spaces, as well as when sharing them with other organization or individuals. It is to be ensured that use of applications and platforms does not violate students data privacy.

Plan the study schedule of the distance learning programmes
To organize discussion with the stakeholders to examine the possible duration of school closures and decide whether the distance learning programme should focus on teaching new knowledge or enhances student knowledge of prior lessons. Plan the schedule depending on the situation of the affected zones, level of studies availability of parents, needs of student. It is also suggested that to choose the appropriate learning methodologies based on the status of educational institution closure and homebased quarantine, and avoid learning methodologies that require face to face communication until the situation gets normal.

Develop distance learning rules and monitor students learning process.
It is important to define the rules that governed online learning. Design the formative questions, exercises or test to monitor closely students learning process, and to make use of tools to support submission of students feedback and avoid overburedenning the parents.

Conclusion
COVID-19 has not only effected the economic sector of the world, but has also impacted the education sector immensely worldwide. This has created many challenges, but at the same time various opportunities aslo emerged e.g. it leads to the exploration of possibility of open and distance learning (ODL) by the use of different digital technologies such as Google meet, webmax, watts app, facebook etc. to cope up in the present crisis of COVID-19 pandemic. Although countries are not fully equipped or prepared to make education accessible to each and every student at every corner by the use of this digital platforms as all the students did not have the privilege to access this technology. But all the educational institution especially universitites and colleges are trying to come up with a solution to resolve this problem; it is the need of the hour for the educational institution to strengthen their knowledge and information technology infrastructure to be ready for facing COVID-19 like situations.
If the COVID-19 crisis goes longer there is urgent need to maximize the utilization of online platform. So that students can not suffer but can also complete their degrees and get adopted to the online digital classes. Morever, there is need to formulate policies for the same.

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