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# **Impact of Covid-19 Pandemic on the Higher Education**

Amanpreet Kaur

Research Scholar, Department of Education Panjab University, Chandigarh amansehgal8426@gmail.com

### **Abstract**

With the increasing connectedness of the world, the risks that are facing by the people globally has also been increased. The pandemic we all are facing today is not only restricted to the national borders. Regardless of caste, creed, gender, nationality, religion or region, status of people either in terms of money or education it has affected all the people of all the age-groups and its consequences hit very hard all the sections of the society. This pandemic has revealed the actual picture of our education system, its policies and plans regarding the equality and equity of education. The lockdown restrictions during COVID-19 have caused sudden closure of schools, colleges and universities nationwide which lead to inequalities, inequities and inadequacies from access to online classes, broadband facilities, requirement of computers and mobile phones to learning supportive environment at home. Students belong to well-off families and privileged ones could find the way to learn online and disadvantaged ones remained away from online learning which hamper their education. A great misalignment has been seen among the resources, needs and distribution of these. Even teachers were not updated and trained to adapt new online pedagogical teaching methods. Both teachers and learners are at risk of falling behind. As the things are getting change, flipped classrooms and blended learning may possibly become the integral part of the future education system. To meet the challenges of the new normal, our education system need to make new plans and policies, adopt new research strategies and infrastructure for the smooth functioning of all the educational institutions and to ensure better learning of the students for their coming future. This research paper throws light on how schools and the higher education get effected by pandemic covid-19 and how it can bounce back to new normal to meet the future challenges.

**Keywords:** Covid-19 pandemic, higher education, teaching and learning, virtual education, online e-learning

## Introduction

The COVID-19 originated in Wuhan, Hubei Province, China, in December 2019 which was officially declared as the causative pathogen of COVID-19 by the Chinese Center for Disease Control and Prevention on January, 8,2020 (Li et al. 2020). World health organization (WHO) announced the outbreak of new coronavirus disease as a pandemic in March, 2020 (WHO, 2020). Covid-19 which is known as Coronavirus which is an

infectious disease and it can be transmitted from one person to others in just a few minutes through the droplets in air and by touching the surface or things which have come in contact with the infected person. The matter concern is nobody is immune to coronavirus, especially the elder and young ones are more susceptible to it (Bender, 2020; Meng, Hua, & Bian, 2020). Both the patients of symptomatic and asymptomatic are the carriers of the coronavirus (Chan et al., 2020; Rothe et al., 2020). At present efforts are made across the world to control the risk of transmission of the virus through diagnosis and medication of the patients (Wang et al., 2020).

Due to COVID-19 all the educational institutions have to suddenly shift to online teaching mode unpreparedly. According to UNESCO (2021), "One year into the COVID-19 pandemic, close to half the world's students are still affected by partial or full school closures, and over 100 million additional children will fall below the minimum proficiency level in reading as a result of the health crisis." The pandemic has sent shockwaves to all the nations worldwide. People across the globe has witnessed the exponential rise in corona infected patients in hospitals and a huge health crisis among human beings during and even after recovering from the disease. All the governments in the world grappled with the spread of pandemic by shutting down the countries and all the social and economic activities which has adversely affected the education sector as well.

To mitigate the transmission of the disease and to strengthening the educational planning, preventive health measures are need to be taken which will provide an opportunity to the students and stakeholders to continue the smooth learning while combating the spread of virus as well (Lee et al, 2003).

# Sudden shift of teaching and learning to virtual and online e-learning

A large number of educational institutions have abruptly shut down their campus worldwide due to pandemic Covid-19 in March, 2020. This sudden disruptive closure of schools, colleges and universities lead to remote education, which was challenging situation for the large comprehensive institutions to develop the new approach, timely completion of the courses and conducting the examination. It was tougher situation for the faculty of Sciences, Engineering and Technology to teach lab practical. The main factors that impacting the educational institutions are lack of digitized infrastructure, capacity, competency and capability of teachers and including the availability of gadgets laptop, mobile and data with the students as well. The pandemic crisis has aggravated the digital gap as not all the students has equal access to digital technology and high-speed internet network, socially disadvantaged section of students suffered a lot in their studies. Even in new normal, due to abiding the physical distancing measures hundred percent attendance of students is not possible so a very diligent planning and instructional design is needed to frame for teachers and students within the limits dictated by institutional infrastructure. For setting up the high tech infrastructure the institutions are facing financial constraint due to potential drop in student's enrollment and placement also.

In country like India, where conventional teaching method is being used, the pandemic has brought a drastic transformation in chalk-duster teaching method to technology driven model of teaching, creating more space for flexible mixing of synchronous and asynchronous teaching-learning, flipped classrooms and blended mode

of learning. It's a wakeup call for all institutions to know the importance of technology in conducting research and new innovations to keep pace with the new normal situation and to cater the needs of the students.

# **Recommendations and opportunities for higher institutions**

Keeping the present scenario in mind, this paper put forth the opportunities for higher institutions to combat the educational problems which are emanated from COVID-19 pandemic.

- Higher institutions should integrate the environmental and health courses in curriculum and make it accessible to all the students of the campus and not only restricted to science related majors subjects (Türkoglu, 2019).
- Strengthening the environmental hygiene practices in all levels of learning is the need of the hour. For this students have to be provided with health management tools and let them practice the protocols themselves until it instill the habit in them and a good hygiene become the culture of school and society. To attain this goal, universities should craft effective health and environment related policies which anchored on sustainable environmental framework of university (Lee et al., 2003).
- It has been come in light during pandemic a number of students are struggling with mental health problems. So it become mandatory that higher education should give priority to medical services and programs along with the academic and career counselling services and make sure its easily accessible to the students in the campus through online mode. In universities, student's mental health needs have earned a considerable attention (McBride, Van Orman, Wera, & Leino, 2010) due to significant rise in number of mental health disorders among college students (Blanco et al., 2008; Dalky & Gharaibeh, 2018; Hinderaker, 2013). Students should be provided free medical and mental health counselling from medical professionals and health experts like psychiatrist and guidance counselors even outside the campus if needed (Hinderaker, 2013).
- Realizing their commitment with students and community, universities are need to display adaptability, agility and innovative ways in dealing with the problem of pandemic. Though academic continuity is of prime concern but emotional support and healthcare facilities is also need to be considered. For this higher education institutions need to switch to blended mode of teaching and learning, MOOCs, creating e-resources, upgraded healthcare infrastructure, scholarships, international collaborations at global level, flexible teaching methods, establishing high-tech digitalized office adopting Artificial intelligence facilities, organizing capacity building programme for teachers.
- To combat the pandemic and to make more realistic plans and policies to overcome the effects of disease, there is even more dire need to conduct research and make authentic research reports. For this there is an urgent need to engage the faculty, researchers and professionals in research and evaluation to step up evidence based research documents which will improve the functioning and excellence of the higher education institutions.

## Post pandemic focus of research

During pandemic research community suffer a lot in managing the research projects, due to mandatory social distancing it is difficult to conduct the research particularly which involve human subjects and field work. The career plans of many researchers pursuing doctoral and post-doctoral degree is at stake. The universities and research funding agencies will soon be under financial crisis and focus of research is shift to COVID related project and other projects are losing its importance. To bring back the research to normalcy, higher institutions need to carefully design the research management guidelines and ensure their implication. For lab work and experiments, it needs to re-think and re-create the working models to plan the smooth and safe functioning of experiments. The most important, universities will have to invest and develop in health infrastructure and in this government may provide funds to prevent any compromise on part of safety of the students and staff members.

With increase in pandemic period, changing focus of the research projects, some major areas that come up and which may see surge in large funding include development of mental health tools and devices, remote learning tools and applications, health care equipment, antiviral therapies, artificial intelligence, augmented reality, virtual reality etc.

## **Implications for further studies**

This paper discuss and throw the light on pedagogical, government policy implications and post pandemic trends in research. But curriculum is the heart of the education, so universities need to reassess the curriculum to gear towards the readiness for virtual teaching learning in new normal and to effectively overcome the hurdles emanated from the pandemic. This paper may serve as future reference to study the effects of COVID-19 pandemic on the education but on the other hand there are number of gaps in scientific community to be addressed which may advance the scientific evidences which can suggest how to be prepared in future in response to another outbreak of virus.

#### Conclusion

Sudden closure of worldwide all the educational institutions in a very short span of time due to COVID-19 has affected the study of all the students. Schools and higher educational institutions are struggling to surmounting the challenges of planning and implementing the new approach in teaching and learning methods, evaluations and assessment procedure in their system. Global pandemic had geared all the educational institutions with the emerging trends in technology but it also has raised the concern of achieving the goal of equity and equality in education for all and mental health issues. It is the time for the higher educational institutions to must be ready for its toughest drive ahead post-pandemic where they need to steer their future by taking robust decisions. Government and institutions need to collaborate for heavy investment in technical infrastructure to shift from conventional to virtual online e-learning platform and to adapt blended model of education. Also approaches to conduct examination and assessment of learning need to be reviewed in comply with new learning pedagogy in the virtual world. Open access educational resources in various regional languages should be developed and refresher courses, faculty development programs, capacity building programs, online workshop and webinars would go a long way to develop and train the faculty in order to cater the needs and fulfil the commitments with students and community to build a better world.

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