

Original Research Article

Impact on Pakistani Students Education and Life Pattern During Covid-19 Pandemic

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Abstract

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Declaration of COVID 19 as a pandemic by WHO on 11th March 2020 created an outrage around the globe, particularly creating an emergency situation which leads to lockdown in many countries imposed by their respective governments. This countrywide lockdown to minimize the spread of corona outbreak had immerse problems not only in terms of health but as financial crisis, increasing mental health issues including anxiety, depression etc. In addition to that societal discomfort, unemployment, disturbance in the normal life cycle, a siege to all public services and activities imposed a synergic effect. The research was carried out on Pakistani students from different fields of education to estimate the constant constraint of mental and physical burden on students during this lockdown. We performed immense scrutiny on students using Google forms to probe how educational and life patterns have been affecting them throughout this period of pandemic. It was modeled that in the overall population of the survey, females had a greater impact comparatively to males. According to the research mental health, financial crisis and behavioral effects were the considerable concerns of the majority of the population. There is a need for significant fiscal effort to sustain balanced health, equality and persistence in student's life.

Keywords: COVID-19, Students, E-Learning, Impact, Psycosocial

INTRODUCTION

Pandemics are rare to occur, but when they happen they change the entire course of history. The same thing happens during Coronavirus infectious disease that starts in late 2019 and spreads globally (Li et al., 2020). On 11th March 2020 WHO announced Covid19 a global pandemic (Cucinotta and Vanelli, 2020). Around 722,435 confirmed cases have been reported around the world, including 33,997 deaths by 29th march (Cucinotta and Vanelli, 2020) and by September 2020 26 Million cases and 870K deaths with only 17.3 Million recovered (WHO Coronavirus Disease Situation Report, 2020).

Concerning the misfortune of transmission, important mitigation strategies were given by public health agencies to combat the virus. These include social distancing,

quarantine, restriction in public places, local and international travel ban, school closure and lockdown (Fauci et al., 2020). Widespread of the virus and public health measures impeded all the educational activities, not only this but it highly affected business communities around the world, health and tourism. A huge number of universities around the world have either delayed courses or opted virtual learning environments (VLEs). Most of them had also dropped all events such as workshops, conferences, sports and other activities (Sahu, 2020). To reduce the direct impact of school closure on the life of students, UNESCO supported and encourages all the countries to continue education through distance learning and facilitates underprivileged countries in digital

education (Pragholapati, 2020). After the closure of Washington university on 7th march, all other college and universities started closing down and prohibited all educational activities, impacting millions of students around the world (Billy, 2020).

In an attempt to halt the infection from spreading, the government of Pakistan took necessary implications such as country wide smart lockdown was announced in March 2020. However, it has significantly affected different sectors in the country, most particularly the students and education sector. The increased spread of infection, long period of isolation and frozen educational activities have taken a major toll on mental health of students (Cao et al., 2020) causing considerable depression, social tension and behavioral changes (Brooks et al., 2020). Research shows that these consequences can have harmful social and behavior changes in the life of students, especially those deprived of basic facilities that will further increase the likelihood of inequalities in the country's education sector (Van Lancker and Parolin, 2020). Earlier in the 1918 Pandemic teachers use tangible objects like speller boards and alphabets to teach their students and they also used to send assignments at home (Glass and Glass, 2008). Now the growing advancement of digital technologies is creating different learning opportunities for students (Wikrama-nayake, 2005). However, there are mixed responses about the impact online education has on the student's learnability, intellectuality and education. Some authors believe that through e-learning students get the opportunity to Improve their computer skills on the other hand different researchers argued that absence of in person interaction between students-teacher results in the declined in instructional effectiveness among students (Chen et al., 2010).

Although students have started E-learning using different platforms even before the pandemic in Pakistan but still they were not very comfortable and used to such VLEs especially in Medicine and Dentistry (Baig et al., 2019). However this pandemic has forced all students to use such platforms leading to more psychological distress among students (Anzar et al., 2020).

Therefore, the purpose of this study is to evaluate and analyze the changes in the life pattern of students during the pandemic, their mental health after months of social distancing and self- isolation / smart lock down. It also focuses on the influence of public health / educational policies on students, belonging to the different back-grounds of educational fields, and the productivity of e-learning.

Aim

The aim of this study is to look at the impact of Covid-19 on Pakistani students' life pattern and education.

Objectives

- To explore the field of study, E-learning pattern and future prospects like job prosperity.
- To assess students perception of studying and availability of resources while e-learning
- To find association between socio-demographic and students life and study patterns

METHODOLOGY

A cross sectional analytical study was conducted for measuring the impact of covid-19 among students of Pakistan from all major cities. The data collection was done in March 2020 when the coronavirus outbreak was at peak globally. The target population comprises undergraduate and post graduate students. The respondents in the target population were sampled by convenient sampling. Students were included based on their enrolment in Pakistani Institutes and residing in different cities of Pakistan. The students can be a day scholar or hostilities residing in Pakistan at the time of study. The study does not include Pakistani students studying abroad. The impact was assessed using online questionnaire. To ensure the confidentiality and reliability of data the questionnaires were filled anonymously. The Questionnaire generated reflects the objectives of this study. For this the Questionnaire was piloted and validated. This Questionnaire comprises of 20 questions with a format of closed ended, open ended and Likert scale. The sections include socio-demographics like age, gender, field of study, area of resident and residing zones declared by government (Red zone, green zone) as per covid-19 cases for smart lockdown. The next section asked about how they are socially and mentally affected by this pandemic, their financial crises and the effects of policies in their pattern of life. Respondents had to answer using a 4 item Likert rating scale ranging from 0 (not affected) to 3 (severely affected). Exploratory Factor Analysis (EFA) was performed on 13 factors and 6 items met the cut off criterion with factors having Eigenvalues greater than 1. The data were analyzed statically using SPSS software. Different tests were applied including Factor Analysis (EFA), Generalized Linear Model (GLM) for Multivariate and Univariate Analysis, Chi Square Test for Associations.

RESULTS

The data of this study were collected using Google Forms ® and links were distributed on various online university forums across Pakistan. In this study, 1080 students participated. Among them, 1050 responses were included and the remaining 30 were excluded due to incomplete entries with a response rate of 97.2%. Among these 1050

Table 1. Association between Field of Study, perception on future job opportunities and time spend on e-learning during Covid-19

Field of Study	Job opportunity in your Field after Covid-19 (n)				Time Spending on E-learning during Covid-19 (n)				
	Not Sure	My field will Perish	My Field remains same	My field will flourish	Zero Hours	Less than 2 Hours	2-6 Hours	6-8 Hours	More Than 8 Hours
Commerce	80	15	31	63	15	77	74	17	6
Arts / Media	30	2	7	24	8	23	27	4	1
Engineering	71	16	32	59	27	73	55	16	7
Medicine	58	6	11	222	27	135	103	22	10
Dentistry	95	4	36	81	13	88	99	13	3
Bachelors of Science.	33	1	4	54	10	37	35	7	3
Allied Health	3	1	0	10	2	4	7	0	1
P-value	P=0.001*				P=0.044*				

Chi-square Test

Table 2. Multivariate Analysis (Generalized Linear Model) n=1050

Variables	Gender Impact during Covid-19 (Threshold Females)		
	β (S.E)	p-value	95% CI (Lower to Upper)
Mental Health	--		--
Highly Effected	-0.325(0.21)	0.004	-0.750 to 0.101
Less Effected	0.187 (0.18)		-0.176 to 0.551
Moderately Effected	-0.418 (0.19)		-0.80 to -0.26
Financial Crises	--		--
May be	-0.33 (0.182)	0.002	-0.692 to 0.025
No	-0.58(0.168)		-0.90 to -0.251
Behaviour Impact	--		--
Less Effected	-0.388 (0.204)	0.120	-0.789 to 0.013
Moderately Effected	-0.291 (0.183)		-0.651 to 0.068
Not Effected	-0.512 (0.220)		-0.943 to 0.080

* β =coefficient of regression, S.E=Standard Error, p-value<0.05, CI= Confidence Interval

participants, there were 635(60.5%) females and 415(39.5%) males with a mean age of 21.0 Years (± 2.79 SD). The youngest participants were aged 15 years and the eldest were 39 years old. There were 7 predetermined fields of studies for students defined in this study in which students were enrolled in undergraduate, postgraduate, doctorate, and post-doctorate levels of qualifications. The field of study includes

- Commerce, Accountancy, Economics and Law (n=189, 18%),
- Arts, Media, Fashion Design and Hotel Management (n=63, 6.0%),
- Engineering and IT/ Computers (n=178, 17%),
- Medicine (n=297, 28.3%),
- Dentistry (n=216, 20.6%),
- Bachelor of Sciences (n=92, 8.8%),
- Allied Health, Nursing, Pharmacy and Physiotherapy respectively (n=14, 1.3%).

The association among students from different fields of

studies were found statistically significant with future job opportunities and their effort on spending time on E-learning shown in table 1.

The study was conducted in April 2020 and participants were asked about their status of current residence. There were 145 (13.8%) students living in Red Zone as per infected zones identified by the Government of Pakistan in Covid-19 Lockdown. In the green zone where infected cases are either less or not prevailed, 285 (27.1%) students were residing, and 620(59.0%) have no idea about their residence status for covid-19 infection.

When it was asked about the impact that how much this pandemic has produced an effect on your life, females were more strongly affected (23.5%) than male counterparts (18.1%) p<0.05. The same pattern emerged on mental health, behavioural change and financial concerns as shown in Table 2. The impact of this pandemic on students life reflects majority as strongly affected (n=437, 41.6%), while many were moderately

affected (n=353, 33.6%), few were less affected (n=210, 20%) and not effected were (n=50, 4.8%).

The reasoning for this impact was also asked and open ended answers were collected in written. The variety of answers were *“Study is effected, school / universities are closed, examinations are postponed, self-isolation /quarantined at home, cannot meet friends and family, unpredictable situation, social life is effected, emotional stress, becoming lazy, fear of getting infected, boredom, co-family does not support in house work and no maids were there to help, no physical activity and exercise, feel depression, semesters are extended, online classes are difficult to understand, bad connectivity of internet, news and fake rumours make us panic, sleep and daily routine is disturbed, financial issues, budget constraints & expenses, have nothing to do, it has effected on our business, living like prisoners, religious activities are stopped, never sit with my siblings more than 3-4 hours, not able to go on job, cannot meet family as they are health care workers, life seems to be useless, cannot travel, hostilities, I am happy to stay at home with family”*.

As physical classrooms are in lockdown, the students were asked that are they prepared for virtual classrooms and the majority consider online classes as non-productive (n=546, 52%) where students are spending more than 8 hours (n=442, 42.1%) on electronic gadgets like Mobile phone, TV, Laptop/computers at home. While only less than 2 hours are spent on E-learning (n=438, 41.7%). Still the students are not satisfied with the Internet services and digital devices (n=559, 53.2%).

In a generalized educational scenario, students consider that there should be a change of policy matters (n=662, 63%) according to the lockdown situation and few consider that this lockdown has brought a positive change (n=447, 42.6%) in their lives.

DISCUSSION

Public health protocol was implemented to reduce the number of coronavirus cases, but these preventive measures had caused several consequences. In this study, it was observed that females were more affected than male counterpart due to pandemic, In another study conducted in Hong Kong, it was found that female population are more prevalent to show emotional discomfort (Lau et al., 2010) however a study conducted in China has found that gender had no significant difference $p>0.5$ in the level of anxiety and tension due to COVID 19 (Cao et al., 2020).

Public health officials are trying to tackle the situation of coronavirus, but this period has increased stress, anxiety and tension among people and affected mental health (World Health Organization, 2020). Study indicates that student population is mentally disturbed and

distressed $p<0.04$, had major mental breakdowns due to lack of interpersonal communication, fear of losing loved ones and distancing (Xiao, 2020). In similar research in China, the psychological impact of students was evaluated and showed that 24.9% of students experienced consternation (Cao et al., 2020).

It has been observed in the study that about 19.6% students are highly affected and experienced mental stress due to increased demand and non-availability of resources. One reason for unavailability in medical supplies and food was because of the travel restrictions, disturbed global trade and shortage of supply chains (Ayttey et al., 2020).

Considering the pandemic chaos and lockdowns, people have been observed to respond differently such as panic buying supplies, stocking products an home. In this study, the mean outcome of behavioral impact on Pakistan students, whereas research was conducted in China to investigate psychological and behavioral impact between Wuhan and Shanghai where Wuhan participants were found to be more affected by the pandemic and exhibit change in their actions, manners and also responded differently toward the outbreak and its consequences ($p<0.001$) (Qian et al., 2020).

Corona around the globe has not only affected social life and daily activities but many countries and industries are preparing to face financial crises ahead. This has mirrored potential financial crises in the educational sector too. Travel bans in that time across the globe have left international students abandoned with restrictive funding. Students may be facing financial problems which include debts, loans, housing, application fees, books and other study material. For a long duration of time educational institutes might remain shifted to online classes and with fewer foreign students on board (Witze, 2020). As universities face major changes, their financial outlook is becoming dire. Revenues are plummeting as students (particularly international ones) remain home or rethink their future. This all reflection has shown in this study as well regarding financial issues and right career selection where many are not sure that their field of study would take them towards a better financial relaxation or not.

Limitation of Study

The study was conducted in a quantitative way with exploring the impact and its pattern with just few responses as open ended however, a pure qualitative study can reflect in-depth knowledge of life impact during covid-19 lockdown.

Conflict of Interest

There was no conflict of interest found in this study

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