Analysis of Stress, Anxiety and Depression of Children during COVID-19

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ABSTRACT
Coronavirus is believed to have originated from a wet market in Wuhan, China, and has spread all over the world, resulting in a large number of hospitalizations and deaths. Social scientists are just beginning to understand its consequences on human behavior. One policy that public health officials put in place to help stop the spread of the virus were stay-at-home/shelter-in-place lockdown-style orders. Schools, Colleges and Universities across the country have now been shut down till now due to Covid-19. Some Governments in India impose lockdown to reduce the crises created by this unknown virus. It is now difficult to make final assessments by school, school leaving examinations and entrance tests for undergraduate and post-graduate courses. This disruption implies for students across the socio-economic spectrum, both in terms of learning outcomes, food and economic security. Here the aim is to discuss the implications of lockdown-induced in schools in both urban and rural areas in India.

The whole world implemented a nationwide lockdown to curb the transmission of the virus. A survey was over Five hundred families to complete a questionnaire with questions around symptoms of depression, anxiety, stress, and family affluence. The humans who do not have enough supplies to sustain the lockdown were most affected. Families with affluence were found to be negatively correlated with stress, anxiety, and depression. Stress, anxiety, and depression more than others are seen in students and healthcare professionals. The main aim of the paper is to find out how symptoms of depression, anxiety and stress on parents due to COVID-19.

Keywords-- COVID-19, Stress, Mental Anxiety, Depression, Children and Attributes

I. INTRODUCTION
COVID-19 made a diverse range of potential effects of the crisis, such as reduction of stress, improved sleep and relaxation, loss of social pressure, more time to think and improved affect.

Both positive and negative responses of children and families to this crisis should be understand the impact on modern daily life routines and environments due to COVID-19. This has a positive effect on protecting health, especially for the elderly and ill people. Children, adolescents and their parents are usually at a much lower risk for severe illness, even if there have been rare deaths in this age range as well. More of children and adolescents have faced the effects of school closures. In addition, most other social and out-of-home activities for children and adolescents have been canceled. They no longer enjoy positive interactions with their sport coaches, music teachers, friends and peers. Children and their families have to share a restricted space at home with limited resources and have to change their daily life and routines to cope with numerous new challenges.

Children are supposed to get home schooling, supervised by parents. However, some parents are expected to work as much as possible at home office or, due to the nature of their job, are confronted with daycare problems. Support and the help of grandparents and other family members fall away, as they should avoid contact. All family members struggle with their own anxieties in this situation and for many families, economic pressure further increases stress. When a family member dies, the child has to deal with their grief. Quite often, a combination of challenges clusters in families with limited space, job loss, and other known risk factors such as mental illness/disabilities of family members or single parenting.

Recruitment is not possible because of home working and the difficulty of ensuring equity of opportunity. On the positive side, we see an acceleration in switching to online training and supervision, development of e-learning. In the long term, child mental health is the basis for future adult mental health which is closely associated with general health and is, thus, related to productivity and well-being in our society. Although measures that aim for “social distancing” are important to protect the health of our society. Effective alternatives for school closures may be “physical distancing” measures. It is basically to keep students in classrooms and to decrease the number of students per class and to increase space between students.

II. REVIEW WORKS
Around the globe Covid-19 has caused significant distress. It has caused serious damage to public mental health apart from infection from corona virus. It is known to everybody that lockdowns and quarantines are essential to suppressing COVID-1 [1].
All persons may leave their residences only for essential activities or to provide or perform essential functions or to operate essential businesses. All businesses (except for essential businesses) are stopped. If employees and contractors can work from their own residence, then businesses may continue to operate. Essential businesses should maintain social distancing of 6 ft. between employees and the general public [2]. Religious institutions must limit in-person staff to 10 people or less when preparing video or teleconference services and must follow 6 ft. social distancing [3].

Due to Covid-19 it has brought about many unknowns and thereby causing social stigmatization towards groups of people, those infected and their family [4]. Children are affected in the social or educational domain. These situations have serious health consequences as well as a risk of late presentation of corona patient to the hospital [5]. Every disaster has its learning opportunities and so does the current Covid-19 crisis [6]. Children are now more time to spend with their parents. School closures gave them awareness that school and education is an opportunity. Parents get more times to educate their children on health responsibilities and involve children in washing hands at regular interval. Parents are forced to rely on their own skills to manage children with mild symptoms of any disease and this might increase parents’ self-confidence in maintaining the health of their children.

Proposed Method

A study has been made over children of families in West Bengal, Kolkata, India, on the Attributes- Stress, Mental Anxiety, Loneliness, Home quarantine, Single Child or more than one child, Depression, Closure of Schools, Social pressure and Fear for family Illness for the effect due to COVID-19. During the study it is fond that the entire studies will be considered on the three attributes-Stress, Mental Anxiety and Depression. The study is made for four months from April 2020 to July 2020. The entire processes are described from Figure 1 to Figure 5 and Table 1 to Table 6. The analysis shows that the increase of selected attributes is evident from final result.

| April | Cities | Urban.Areas | Rural.Areas |
|-------|--------|-------------|-------------|
| 5     | 10     | 5           | 4           |
| 12    | 12     | 18          | 20          |
| 18    | 30     | 10          | 15          |
| 23    | 25     | 20          | 30          |
| 28    | 11     | 17          | 19          |
| 30    | 4      | 14          | 9           |
|       | 82     | 84          | 97          | 263         |

Table 1: Attended Families in April 2020

Figure 1: Graph shows Attended Families in the Month of April 2020
Table 2: Attended Families in May 2020

| May  | Cities | Urban-Areas | Rural-Areas |
|------|--------|-------------|-------------|
| 10   | 6      | 10          | 8           |
| 15   | 10     | 5           | 5           |
| 20   | 9      | 4           | 7           |
| 27   | 18     | 10          | 7           |
| 31   | 11     | 15          | 6           |
| 31   | 7      | 14          | 11          |
| 55   | 58     | 44          | 157         |

Figure 2: Graph shows Attended Families in the Month of May 2020

Table 3: Attended Families in June 2020

| June | Cities | Urban-Areas | Rural-Areas |
|------|--------|-------------|-------------|
| 15   | 6      | 10          | 8           |
| 10   | 10     | 5           | 5           |
| 25   | 9      | 4           | 7           |
| 27   | 18     | 10          | 7           |
| 31   | 37     | 29          | 27          |
| 55   | 58     | 44          | 124         |

Figure 3: Graph shows Attended Families in the Month of June 2020
Table 4: Attended Families in July 2020

| July | Cities | Urban/Areas | Rural/Areas |
|------|--------|-------------|-------------|
| 15   | 6      | 10          | 8           |
| 10   | 10     | 5           | 5           |
| 25   | 9      | 4           | 7           |
| 27   | 18     | 10          | 7           |
| 31   | 37     | 29          | 27          |
| 80   | 58     | 54          | 192         |

Figure 4: Graph shows Attended Families in the Month of July 2020

Table 5: Total Collected Families from April 2020 to July 2020 and Total attended Families is 736

| Families | Month | Stress | Anxiety | Depression |
|----------|-------|--------|---------|------------|
| 263      | April | 100    | 90      | 73         |
| 157      | May   | 40     | 60      | 57         |
| 124      | June  | 24     | 40      | 60         |
| 192      | July  | 80     | 100     | 12         |
| 736      |       | 244    | 290     | 202        |

Table 6: Stress, Anxiety and Depression during four Months
III. CONCLUSIONS

The depression is viewed as a state of disinterest. It is viewed as a state of disinterest in daily activities. Children are facing a pandemic in fear of the unknown disease, coronavirus, making them anxious, stressed and depressed. The region is divided into Cities, Urban Areas and Rural Areas. Children are classified from age group 4 to 12 years. The aim of the paper is to study effects of three attributes on the children.

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