Commentary

iMedPub Journals
www.imedpub.com

Journal of Neurology and Neuroscience
ISSN 2171-6625

2020
Vol.11 No.6:336

DOI: 10.36648/2171-6625.11.1.336

Consideration of the Effects of COVID-19 on the Mental Health of Students

Divyash Shah* and Patricia Kenn

Bergen County Academies, 200 Hackensack Ave, Hackensack NJ, 07601, USA

***Corresponding author:** Shah D

ivsha23@bergen.org

Bergen County Academies, 200 Hackensack Ave, Hackensack NJ, 07601, USA.

Tel: + 9174946973

Citation: Shah D, Kenn P (2020) Consideration of the Effects of COVID-19 on the Mental Health of Students. J Neurol Neurosci Vol.11 No.6:336

Received: July 17, 2020; **Accepted:** September 07, 2020; **Published:** September 14, 2020

Commentary

In the past months, the COVID-19 pandemic has created a new reality for all, including students. The rapid spread of the SARS-CoV-2 virus has led to the implementation of stay-at-home orders and forced students to attend school virtually, especially the New York City metro area, a hot-zone of this pandemic [1]. Although quarantine seems to be the appropriate way to minimize the spread of the novel coronavirus [2], the effect on students' life must be considered. These changes have had an impact on students' daily routines including socializing with friends, which may contribute to increased anxiety and stress [3].

A survey was created made up of 14 questions, which was distributed to 1115 high-school students from 60 towns in Bergen County, NJ. Students were notified that their answers would be used anonymously, and the study was exempted from an IRB review, as stated in 45 CFR 46.104 under Category (4). A total of 258 responses were received, yielding a response rate of 23%, of which six responses were excluded for lacking their zip code information and seven responses for answering less than 50% of the survey. We correlated student responses to their residing towns, which was measured based on prevalence of COVID-19 in the corresponding town at the time of the survey [4]. The students' responses were grouped based on the prevalence of COVID-19 in their towns. Sixty towns were divided into four quartiles, A, B, C, and D based on town prevalence with Group-A having the least and Group-D having the most number of cases **(Table 1)**.

Students from towns with higher prevalence were more likely

Table 1 Student responses.

Study Questions	All Students n=245	Group A (Lowest Prevalence) n=50	Group B n=52	Group C n=56	Group D (Highest Prevalence) n=87
Prevalence of COVID-19 in towns on the week of the study from March 13,2020 * Median (Range)	132 (18-871)	53 (18-80)	113 (83-131)	160 (132-215)	453 (225-871)
How often do you wear face masks when going outside? Percentage responding Always (Sometimes)	35.10% -40.00%	34.70% -38.80%	31.30% -43.10%	33.90% -39.30%	39.50% -40.10%
How much has your social activities with friends (in person) decreased? Percentage responding 50% or more	94.20%	100%	90.20%	92.30%	94.20%
How much has your outdoor activities decreased? Percentage responding 50% or more	73.60%	67.30%	70.60%	67.30%	82.80%
How much have you increased hand washing/hand sanitizing? Percentage responding 50% or more	85.10%	93.90%	86.30%	83.40%	80.20%
[n] denotes sample size of the group					
Values rounded to the nearest tenth percent					
Table plots percentage of students responding changes in their habits due to the pandemic and resulting quarantine.					

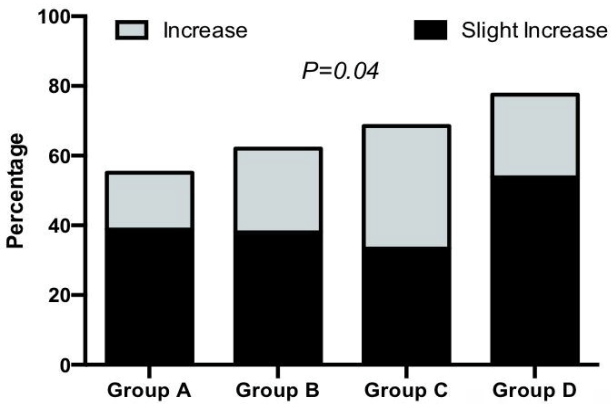

Figure 1 Demonstrates the percentages of students who reported increased levels of stress as a result of the COVID-19 pandemic. Groups divided by quartiles established by prevalence of COVID-19 in student's town. Each bar represents a percentage that responded "increase" from the total responses to that question per group. P-value calculated through a Chi-squared test.

to respond as 35.5% of responses came from Group-D while only 20% came from the lowest prevalence Group-A. All groups (regardless of prevalence) reported major changes to their daily habits:75.1% wore face masks at least some of the time that they went out, 79% reported decrease in social activities by 50% or more, 83% reported increased hand hygiene by 50% or more, and 73% reported decreased outdoor activities by 50% or more as well **(Table 1)**. When the groups were correlated, there was no difference showing that all groups were increasing caution towards the virus.

The percentage of students who came into contact with someone diagnosed with COVID-19 was 56% from Group-A, 58% from Group-B, 60% from Group-C, and 66% from Group-D, suggesting that students living in towns with high prevalence were more likely to be exposed to COVID-19. All students reported a 61% increase in stress levels due to the COVID-19 pandemic. Stress levels were increasing based on prevalence of COVID-19 in the student's town, with 78% of students in Group-D reported an increase in stress. This trend among all four groups was statistically significant (p=0.04), suggesting a significant correlation between cases in towns and stress levels of the students **(Figure 1)**. When students were asked if they believed the situation would improve, 67% of students did not feel confident that the situation would improve by July 2020.

From this study, high school students have shown that their habits have changed as they reported an increase in social distancing and hand hygiene. The increased response rate based on prevalence shows increased concern where prevalence is high. Similarly, the COVID-19 pandemic has significantly increased students' stress levels all around, notably in areas where prevalence is high. Our study did not directly address approaches to reduce stress; however, as the world passes the initial wave of this virus, educational systems must address mental health and students' wellbeing when planning a return to the "new normal" for schooling.

References

1 Lee TH (2020) Creating the new normal: The clinician response to COVID-19. N Engl J Med 1: 1-3.

2 Khan S, Siddique R, Ali A, Xue M, Nabi G (2020) Novel coronavirus, poor quarantine, and the risk of pandemic. J Hosp Infect 104: 449-450.

3 Liu JJ, Bao Y, Huang X, Shi J, Lu L (2020) Mental health considerations for children quarantined because of COVID-19. Lancet Child Adolesc Health 4: 347-349.

4 https://healthgis.co.bergen.nj.us/portal/apps/webappviewer/index.html?id=3ee51425865a4d80bc4a3b8b51a4497d