Evaluating attitude, understanding, and perception towards lockdown, boredom, and subjective happiness in nursing students related to COVID-19 pandemic lockdown in India: A cross-sectional study

Dron Kinnarbhai Bhandutia¹, Swarna Buddha Nayok², Sathyanarayana M.T.³*, Dhanashree Akshatha H.S.⁴

ABSTRACT

Introduction: In the light of the recent covid-19 lockdowns in India, it is quintessential to evaluate attitudes and problems faced by the nursing students. This further, helps in improving the current and future response of the paramedics to dire outbreaks. Aim: To evaluate the attitude, understanding, and perception towards lockdown imposed due to COVID-19 pandemic. Also, to measure the levels of boredom and subjective happiness in nursing students during this period. Settings and Design: A cross-sectional study was conducted and one eighty-seven nursing students, under lockdown, were evaluated. Materials: Semi-structured proforma for socio-demographic details and attitudes towards COVID 19 lockdown, Boredom Proneness Scale- Short Form (BPS-SR) and The Subjective Happiness Scale (SHS) were applied. Statistical analysis: Descriptive analysis for socio-demographic details and Pearson's correlations for categorical variables and Spearman's correlations for ordinal variables were used. Results: The mean age of the sample (N=187) was 19.85 years (Standard Deviation=1.391). Most found lockdown justified (87.15%) and beneficial (94.64%) to prevent infection spread and protect the public, mainly for moral obligations towards the society (63.1%). The mean BPS-SR score was 15.62 (SD=3.32) and that of SHS score was 3.84 (SD=.979). Only 8% showed higher boredom levels and 69.5% showed higher levels of subjective happiness. Most (47.05%) felt that a combination of familial, financial, and social loss would occur. Conclusion: Positive attitude, adequate understanding, and appropriate perspective regarding COVID 19 lockdown, seems to bring...
Evaluating attitude, understanding, and perception towards lockdown, boredom, and subjective happiness in nursing students related to COVID-19 pandemic lockdown in India: A cross-sectional study

about relatively higher levels of subjective happiness and lower levels of boredom among nursing students are found in this study.

Keywords: Covid-19, Lockdown, Pandemic, Nursing students, Subjective Happiness

In December, 2019, a series of pneumonia cases of unknown origin emerged in Wuhan, Hubei, and China, with clinical presentations resembling viral pneumonia. Sequential analysis of lower respiratory tract samples indicated a novel coronavirus, which was named 2019 novel coronavirus (2019-nCoV) later renamed as COVID-19 (Wilder-Smith & Freedman, 2020). The disease had a high contagion potential, and its incidence increased exponentially. Its widespread transmission was recognized by the World Health Organization (WHO) as a pandemic and it was declared a Public Health Emergency of International Concern on 30 January, 2020 (Coronavirus, n.d.).

To curb the spread of disease with such an exponential spread potential, social distancing, quarantine, and isolation were suggested to people on a large scale (Lancet, 2020). On such lines, the Government of India ordered a nationwide lockdown from 24th, March 2020. The lockdown restricted people from stepping outside of their homes along with suspension of all transportation services. It also entailed prohibition of social, educational or religious gatherings. Educational institutions have suspended regular classes as recommended by the Government of India. As of the writing of this article, COVID-19 cases are increasing in India with no certainty regarding the lockdown’s culmination (Bedford et al., 2020; Lancet, 2020).

While India faces a pandemic of this magnitude for the first time in the past five to six decades, there are other countries that have already faced similar outbreaks like Ebola, Zika, and severe acute respiratory syndrome (SARS) (Brooks et al., 2020). Quarantine has been helpful in the past, especially for containment of SARS outbreak in the absence of vaccines and antivirals, with strict, effective and humane implementation of public protective health measures (Brooks et al., 2020; Wilder-Smith & Freedman, 2020). Related to the SARS outbreak, in 2003, a Canadian cohort was evaluated to understand difficulties and the psychological impact, along with adherence during quarantine (Reynolds et al., 2008). The better one understood the rationale and necessity of quarantine, the better was the adherence. Longer duration of quarantine and the subjective difficulties related to it had a negative impact psychologically as assessed by Impact of Events Scale – Revised (IES-R) (Reynolds et al., 2008; Sprang & Silman, 2013).

In a review regarding the psychological impact of quarantine, out of 24 articles included, most reported negative psychological effects, confusion regarding rules, and anger. Stressors included longer quarantine duration, fear of being infected, frustration, boredom, inadequate supplies of essential goods, inadequate information, financial loss, and stigma. Post-traumatic stress symptoms were also noted. Restricted mobility and perceived loss of liberty added to negative psychological impact. Clear information indicating the need for quarantine protocols, providing adequate supplies of essential goods helped positively. When quarantine is viewed altruistically by the public, better adherence was noted (Brooks et al., 2020).
Evaluating attitude, understanding, and perception towards lockdown, boredom, and subjective happiness in nursing students related to COVID-19 pandemic lockdown in India: A cross-sectional study

Thus, adequate understanding about the ways of spread and prevention of COVID-19 infection should be present. Awareness about the reasons and importance of lockdown, clear protocols with chances of clarification, need and utility of social distancing and personal protective equipment, roles and limitations of the health care system will effectively lead to lockdown adherence and indubitably influence the outcome of the disease. Hence, it becomes essential to study this domain among the Indian population as the impact will be seen on a very larger scale. We chose nursing students to evaluate these features, as they are soon going to be front-liners in the current fight against COVID-19, or in future. COVID-19 pandemic is a novel event that has occurred during their student life. In the current situation, we as psychiatrists should be more aware of their subtle disturbances of mood and behaviour. Thus, this study aims to assess their attitudes toward the lockdown and measures any changes in the behavior of the participants, in terms of boredom and subjective happiness. This helps one in understanding the troubles faced by them and need to prepare them for their respective roles in future pandemics. It is quintessential for them to have the right frame of mind, so that they can cope up and be prepared for stressful situations, later on.

METHODOLOGY

Participants:
This was a cross-sectional study undertaken at a private medical college attached to a tertiary care private hospital. The participants were nursing students with Bachelor of Science degrees. The nursing students were staying at their homes during the course of lockdown and their academic schedule was continued by online learning, which included PowerPoint presentations and online video conferencing.

Tools:

i.) **Semi Structured Proforma** was used to collect socio-demographic details (age, gender, religion) and relevant questions regarding behaviour during the lockdown due to COVID-19 pandemic.

ii.) **Boredom Proneness Scale- Short Form (BPS-SR):** This is an eight-item self-reported scale used to measure trait boredom, on a five-point Likert scale. It has shown uni-dimensionality, with adequate internal consistency and construct validity (Struk et al., 2015).

iii.) **The Subjective Happiness Scale (SHS):** It is a 4-item self-report measuring an individual’s overall happiness on a seven-point Likert scale and was developed by Lyubomirsky & Lepper in 1999. The response format is a 7-point Likert-type scale. A final score is calculated, ranging from 1.0 to 7.0, with those higher scores indicated of being happier. It has high internal consistency, reliability and adequate convergent and discriminant validities (Lyubomirsky & Lepper, 1999).

Procedure:
Institutional Ethics Committee clearance was obtained before starting this study. The data was collected using Google Forms, due to restraints on physical gathering. It was also not advisable to hand out hard copies of the questionnaires and scales. The Class Representative (CR) of each class was called via mobile phone of the Principal Investigator (PI) to explain in detail the need and procedure of the study. Any further doubts were clarified. The PI then sent the Google Forms to the mobile phones of respective CRs, through WhatsApp. The CRs forwarded them to all the nursing students of their respective classes. Informed consent option was present at the starting of the Google Forms, along with the need of the study. The
Evaluating attitude, understanding, and perception towards lockdown, boredom, and subjective happiness in nursing students related to COVID-19 pandemic lockdown in India: A cross-sectional study

students were not asked to give any information which may lead to their identification, and thus remained anonymous. The filled Google Forms were directly sent to the email of the PI, without identification of the sender. Any doubts regarding questions or procedural difficulties faced was informed to the CRs, who first attempted to clarify the doubts by themselves, and then contacted the PI over mobile phone for further clarifications, if needed. Those who did not consent were excluded. These procedures are formulated keeping in mind the current novel coronavirus pandemic situation. We evaluated 187 students in total.

Statistical analysis:
The data was compiled and analyzed using Statistical Package for the Social Sciences (SPSS) version 20. The analysis was mainly descriptive. To correlate between Likert scale or ordinal data, Spearman’s correlation was used. Pearson’s correlation was used for categorical variables.

RESULTS
The mean age of the sample (N=187) was 19.85 years (Standard Deviation=1.391)). Socio-demographic details are given in Table 1. All of them were unmarried. We found significant positive correlation only with education and BPS-SR (P=.023), using Pearson’s Correlation test. Most of them (63.1%) reasoned that both moral obligations to benefit your family and others; and preventing spread of infection to others were the reason for them to stay quarantined. Here, 32% reasoned that they remained quarantined only for the moral obligation to prevent spread of infection to others, and not family. In our study, 51.33% of the students found lockdown to be “totally justified” and 35.82% found it to be justified to some extent. Most 53.47% found lockdown to be beneficial to protect/restore public health. 41.17% found it beneficial in curbing the spread of infectious disease. When asked about how they helped to spread awareness, 32.08% used combination of multiple ways like conveying important information via phone call, posting regarding relevant issues in social media, educating people personally in the neighborhood when they were violating rules, by following rules of social distancing and supplying basic food items to needy and hungry people. 29.94% felt that they have helped exclusively by following rules of social distancing. Most (47.05%) felt that a combination of familial, financial, social and educational loss was the biggest loss they fear of facing during the pandemic, while 25.66% felt it to be only educational. Of the students, 11.22% did not feel they would suffer any loss at all.

Regarding negative effects of lockdown, 14.97% opined for financial losses, 25.66% for crisis to daily wage workers, 5.34% for difficulty in procuring health care for emergencies other than COVID-19. Most, 45.45% found all of the above reasons to be important. Interestingly, 5.34% felt that negative features should be overlooked and 3.2% did not find these as negative aspects. When asked about how they felt for the majority time of the day, 33.15% felt “Boredom, annoyance, frustration”, 30.48% felt “Happiness, relief, joy”, 18.71% felt “Loneliness, helplessness, sadness” and 17.64% felt “Worry, fear, nervousness”. As per the difficulties they faced, 33.15% felt that inability to socialize or go outside their homes to be most difficult and 29.94% felt “feeling of boredom, loneliness, sadness” as important. However, 18.18% did not find any difficulty. Most, 65.77%, felt media reporting has currently increased the stigmatization regarding COVID-19 and 37.43% felt that current stigmatization may lead to avoidance of people coughing/sneezing post outbreak. Regarding stigmatization post outbreak, 36.89% had “no opinion” while 10.16% opined that they themselves may be excessively careful or negatively biased towards people.
Evaluating attitude, understanding, and perception towards lockdown, boredom, and subjective happiness in nursing students related to COVID-19 pandemic lockdown in India: A cross-sectional study

coughing/sneezing post outbreak. Regarding compliance to recommended personal and community protective measures, only 12.83% adhered to staying inside and not going out of their place, 11.76% used masks while opening doors or meeting new people. Only 5.34% practiced hand washing frequently. While 9.62% used all of the above measures, 44.91%, the majority, did not follow any of the above measures.

The mean BPS-SR score was 15.62 (SD=3.32) and that of SHS score was 3.84 (SD=.979). As final SHS scores are continuous (the total SHS score of the 4 items are calculated and their mean is taken as the final score) and BPS-SR score is ordinal, we used bivariate analysis between them, using Spearman’s Rho, we found a significant ($P =.006$) inverse weak correlation coefficient .201, showing subjective happiness and boredom to go inversely with each other. Most reported that they were only “Sometimes” bored during lockdown while not knowing what to do (65.8%), unable to find entertainment (61%) and while doing repetitive things (51%). Most (55.6%) required “more stimulation” on “Sometimes”, while 52.9% were “Sometimes” not motivated and 55.1% found it hard to remain interested “Sometimes”. 54.5% sat idle “Sometimes”, while 50.3% “Never” required something exciting or even dangerous to avoid dullness. Overall, most had low to moderate levels of boredom as the range of total BPS-SR was 8 to 27, whereas the maximum score possible is 40. Higher boredom (16.6%), marked as “Usual” was while one tried to find something to remain interested at while 7.5% were “Always” unmotivated. Keeping a score of 20 or more in the BPS-SR scale to be the ones with higher boredom, we found only 8% to have such scores.

We also found levels of SHS to be close to moderate, with a broad range of 1 to 6.5, maximum possible score to be 7. Keeping a score of 3.5 or above to be relatively happier, we found 69.5% to score above or equal to 3.5, indicating that most had higher levels of subjective happiness. When we calculated the mean SHS score of those who scored 20 or more than 20 in BPS-SR, it was found to be 3.68 (SD 1.15), which was lower than the overall SHS mean score.

Table 1: Sociodemographic date and correlation with SHS and BPS-SR

| Sociodemographic variables | N (%) | $P$ value (SHS) | $P$ value (BPS-SR) |
|----------------------------|-------|----------------|-------------------|
| **Gender:**                |       |                |                   |
| Males                      | 05 (2.67) | .918           | .671              |
| Females                    | 182 (97.32) |               |                   |
| **Religion:**              |       |                |                   |
| Hindu                      | 82 (43.85) | .309           | .962              |
| Muslim                     | 04 (2.13)   |               |                   |
| Christian                  | 101 (54.01) |               |                   |
| **Education:**             |       |                |                   |
| First year                 | 65 (34.75) | .337           | .023              |
| Second year                | 32 (17.11)  |               |                   |
| Third year                 | 27 (14.43)  |               |                   |
| Fourth year                | 63 (33.68)  |               |                   |
| **Residence:**             |       |                |                   |
| Rural                      | 104 (55.61) | .238           | .534              |
| Urban                      | 83 (44.38)   |               |                   |
Evaluating attitude, understanding, and perception towards lockdown, boredom, and subjective happiness in nursing students related to COVID-19 pandemic lockdown in India: A cross-sectional study

DISCUSSION

This study evaluated various attitudes and perceptions of nursing students about current COVID-19 pandemic related lockdown in India, and levels of subjective happiness and boredom. We found that most students found the lockdown to be a justified measure. This is a positive outcome, as the attitude of a person towards lockdown or quarantine is related to how well they understand the reasons for it (Brooks et al., 2020; Reynolds et al., 2008; Wilder-Smith & Freedman, 2020). Thus, students were well informed. We also found that the majority found this to be altruistic. Thus, giving up one’s own liberty to help others is reflected in their attitude. They also participated in their own way to help others in need and also to help spread awareness, showing their empathetic behavior. Such positive factors were also seen in previous studies which proved to be useful in reducing personal stress and anxiety related to pandemic and lockdown (Marjanovic et al., 2007; Person et al., 2004; Reynolds et al., 2008). They also opined regarding the several domains of loss that people will suffer: financial, personal, and professional. They too, found themselves at a loss that may be decided over similar domains, but most opined it would be educational, rather than familial. A few chose to overlook the negative aspects probably in view of the greater good. Overall, these reflect a cautious, courageous, and caring attitude.

When facing the lockdown, about one third were overall bored and annoyed, but about one third were also happy about it. This probably reflects a much-needed time out from their academic and clinical schedule, being able to spend time with family. This is also seen when about one fifth of them did not find any difficulty. Restriction against going out may make them feel annoyed as they cannot socialize with their friends, in this period of relatively less academic work. This is reflected when one third of them opined about decreased socializing opportunities as the problem they personally face (Oshitani et al., 2008).

About two-thirds of them saw the media to be a reason for stigma associated with COVID-19 symptoms and one-third of them felt this may continue. This is a valid concern, as previous studies related to SARS and H1N1 outbreaks have dealt with a similar stigma (McCauley et al., 2013; Person et al., 2004). The role of the media can be both—good and bad. While, accurate information helps in decision making, broadcasting the topic of outbreak throughout the day becomes a source of constant vigilance and fear, from which stigma stems out. About 45% did not use masks in their day to day conversation, maybe as they stayed within their houses. However, they also did not follow recommendations regarding hand washing, which may be due to perceived lack of immediate danger to themselves or their families, or unwillingness and complacency associated with monotonous activities. This is probably the only negative factor that we found in our study, and a serious one. Health care professionals must be utmost careful about their own health during such pandemics, not just because of their own gains but also because they are the potent source of spreading infections to many others, exponentially (Livingston et al., 2020; Phin et al., 2009). Perhaps, as the students are at their homes and not involved in active management of the ill, they have not practiced these measures themselves.

In line with about one third of students feeling happy during this period, we have found about 70% of them to be relatively happy through SHS. As expected, boredom was correlated inversely with happiness, although weakly, as overall the BPS-SR scores were low. This may be because the students are already engaged in online academic programs, along with their
relatively free time at home and a period of about 4 weeks in lockdown, boredom has not become a predominant factor in their lives.

A first of its kind during COVID-19 in India, this study evaluates and presents an overall positive attitude, adequate understanding, and appropriate perspective regarding COVID-19 lockdown, with relatively higher levels of subjective happiness, while being able to spend time at home, with relatively low levels of boredom. Limitations include: a lower sample size, with inherent problems in conducting a study through online Google Form, as misunderstanding about few questions may have not been reported, that is when compared to the ease of it in face to face evaluation.

**CONCLUSION**

Positive attitude, adequate awareness, and appropriate perspective regarding COVID-19 lockdown among nursing students, as found in this study, are essential components to prepare for them for current or any future pandemics, and have a positive outcome overall. This study also shows that the students have relatively higher levels of subjective happiness and lower levels of boredom during lockdown. Furthermore, there is a need for intensifying awareness program and addressing mental health issues. There is no study to date that has evaluated the mental health perspective of people during this lockdown. It is essential to study mental health impact in various populations for planning of effective protective measures.

**REFERENCES**

Bedford, J., Enria, D., Giesecke, J., Heymann, D. L., Ihekweazu, C., Kobinger, G., Lane, H. C., Memish, Z., Oh, M., Sall, A. A., Schuchat, A., Unghusak, K., & Wieler, L. H. (2020). COVID-19: Towards controlling of a pandemic. *The Lancet, 395*(10229), 1015–1018. https://doi.org/10.1016/S0140-6736(20)30673-5

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet, 395*(10227), 912–920. https://doi.org/10.1016/S0140-6736(20)30460-8

Coronavirus. (n.d.). Retrieved April 29, 2020, from https://www.who.int/emergencies/diseases/novel-coronavirus-2019

Lancet, T. (2020). India under COVID-19 lockdown. *The Lancet, 395*(10233), 1315. https://doi.org/10.1016/S0140-6736(20)30938-7

Livingston, E., Desai, A., & Berkwits, M. (2020). Sourcing Personal Protective Equipment During the COVID-19 Pandemic. *JAMA*. https://doi.org/10.1001/jama.2020.5317

Lyubomirsky, S., & Lepper, H. S. (1999). A Measure of Subjective Happiness: Preliminary Reliability and Construct Validation. *Social Indicators Research, 46*(2), 137–155. https://doi.org/10.1023/A:1006824100041

Marjanovic, Z., Greenglass, E. R., & Coffey, S. (2007). The relevance of psychosocial variables and working conditions in predicting nurses’ coping strategies during the SARS crisis: An online questionnaire survey. *International Journal of Nursing Studies, 44*(6), 991–998. https://doi.org/10.1016/j.ijnurstu.2006.02.012

McCauley, M., Minsky, S., & Viswanath, K. (2013). The H1N1 pandemic: Media frames, stigmatization and coping. *BMC Public Health, 13*, 1116. https://doi.org/10.1186/1471-2458-13-1116
Evaluating attitude, understanding, and perception towards lockdown, boredom, and subjective happiness in nursing students related to COVID-19 pandemic lockdown in India: A cross-sectional study

Oshitani, H., Kamigaki, T., & Suzuki, A. (2008). Major Issues and Challenges of Influenza Pandemic Preparedness in Developing Countries. Emerging Infectious Diseases, 14(6), 875–880. https://doi.org/10.3201/eid1406.070839

Person, B., Sy, F., Holton, K., Govert, B., Liang, A., Garza, B., Gould, D., Hickson, M., McDonald, M., Meijer, C., Smith, J., Veto, L., Williams, W., & Zauderer, L. (2004). Fear and Stigma: The Epidemic within the SARS Outbreak. Emerging Infectious Diseases, 10(2), 358–363. https://doi.org/10.3201/eid1002.030750

Phin, N. F., Rylands, A. J., Allan, J., Edwards, C., Enstone, J. E., & Nguyen-Van-Tam, J. S. (2009). Personal protective equipment in an influenza pandemic: A UK simulation exercise. Journal of Hospital Infection, 71(1), 15–21. https://doi.org/10.1016/j.jhin.2008.09.005

Reynolds, D. L., Garay, J. R., Deamond, S. L., Moran, M. K., Gold, W., & Styra, R. (2008). Understanding, compliance and psychological impact of the SARS quarantine experience. Epidemiology and Infection, 136(7), 997–1007. https://doi.org/10.1017/S0950268807009156

Sprang, G., & Silman, M. (2013). Posttraumatic stress disorder in parents and youth after health-related disasters. Disaster Medicine and Public Health Preparedness, 7(1), 105–110. https://doi.org/10.1017/dmp.2013.22

Struk, A. A., Carriere, J. S. A., Cheyne, J. A., & Danckert, J. (2015). A Short Boredom Proneness Scale: Development and Psychometric Properties. Assessment. https://doi.org/10.1177/1073191115609996

Wilder-Smith, A., & Freedman, D. O. (2020). Isolation, quarantine, social distancing and community containment: Pivotal role for old-style public health measures in the novel coronavirus (2019-nCoV) outbreak. Journal of Travel Medicine, 27(2). https://doi.org/10.1093/jtm/taaa020

Acknowledgements
The author appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest
The author declared no conflict of interest.

How to cite this article: Bhandutia. DK, Nayok. S.B, Sathyanarayana. MT, & Akshatha. HS (2020). Evaluating attitude, understanding, and perception towards lockdown, boredom, and subjective happiness in nursing students related to COVID-19 pandemic lockdown in India: A cross-sectional study. International Journal of Indian Psychology, 8(2), 309-316. DIP:18.01.241/20200802, DOI:10.25215/0802.241