

The Study of Change in Sleeping Pattern Noted in Adolescence during the Novel Coronavirus Pandemic Lockdown Period in India: A Social Commentary

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With the rise of the novel coronavirus (COVID-19) pandemic crisis, the world has been facing unprecedented times.^[1] Since the beginning of December 2019, the gripped the entire world causing pandemic situation.^[2] Many countries enforced draconian lockdown to curb the spread of the virus, thereby making it a primarily target for the government all around the world.^[3] India being densely populated, the lockdown was commenced on March 23, 2020, for period of 2 months.^[4] The very concept of lockdown was very new for the adults, making it difficult for them to cope up with. However, the adolescent population was very vulnerable to the consequences of the lockdown.^[5] The entire adolescent (10–19 years) population comprises almost 21% of the total population of India making them a huge census to be ignored.^[6] Furthermore, the impact of the lockdown that was enforced had its own outcomes including short term as well as long term effects on physical health and also on mental well-being in adolescent population. With the enforcement of lockdown, all educational institutions including schools, colleges, and coaching institutions were closed for indefinite time period all across the nation. Thus, this led to significant impact on the social interactions, restricted physical activity as well as play time period. In addition, changes in the food habits also significantly affected by the lockdown taking toll on the general as well as mental health of the adolescent population. The worst part particularly with the adolescent population was in regards to their education. As with the indefinite closure of the schools, major scheduled national level examinations exams that were delayed for uncertain times. One of the other factors which made considerate

impact was already pre-existing psychiatric conditions in the adolescent population. It is estimated that approximately 7.43% of adolescents have at least one psychiatric condition.^[7] The most common psychiatric conditions prevalent in adolescence in India are mainly major depressive disorder, anxiety disorders and substance-abuse disorders. Due to all these factors, circadian rhythms changed considerably in adolescents leading to change in sleeping pattern causing insomnia, delayed and changed sleep-wake cycle. One of the other major contributing factors to this was increase in screen time by the adolescents. With the wide variety availability of smart phones, tablets and internet connection, screening time increased up to 5 h additionally.^[8] The American Academy of Pediatrics reports around 2 h of screen time for adolescents. One of the proposed mechanisms that have led to changes in the circadian rhythm leading to sleeping disorders is due to alteration in the melatonin secretion by lack of exposure to sun, increased screen time, changed meal timings, and altered sleep-wake cycles.^[9] One of the studies that studied the impact on adolescence during the lockdown period found that average sleeping time increased from 6.85 to around 8–10 h in almost around 43.5% adolescent and around 9.3% adolescents experience >10 h of sleep.^[10] This survey used online questionnaire which was conducted with the help of various social media platforms such as Facebook, Instagram, and Linked in Roy *et al.*^[10] Thus, from the above-mentioned factors, we can conclude that the impact on the sleeping pattern of adolescents was significantly impacted during COVID-19 pandemic lockdown period. It is very important to have a healthy sleeping pattern for them as it can critically

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impact the physical health, but also mental health. A normal adolescent usually requires around 8–9 h of interrupted sleep. Thus to maintain that, various factors such as screen time, proper sleeping schedule, diet, and physical activity should be encouraged. Parents should be vigilant about the screen time allotted to the adolescents. In addition, various de-stressing activities and exercises can also be implemented such as simple breathing exercises, yoga, and meditation. Parents should also keep track of their daily schedule and thus can intervene if any help is required. Various professionals such as psychologists, psychiatrists and pediatricians can also help if the condition is not getting better through teleconsultation. In conclusion, a proper sleeping pattern is mandatory for the well-being of our future generation.

REFERENCES

1. Tabish SA. COVID-19 pandemic: Emerging perspectives and future trends. *J Public Health Res* 2020;9:1786.
2. Khanna RC, Cicinelli MV, Gilbert SS, Honavar SG, Murthy G. COVID-19 pandemic: Lessons learned and future directions. *Indian J Ophthalmol* 2020;68:703-10.
3. Barkur GV, Kamath GB. Sentiment analysis of nationwide lockdown due to COVID 19 outbreak: Evidence from India. *Asian J Psychiatry* 2020;51:102089.
4. Sardar T, Nadim SS, Rana S, Chattopadhyay J. Assessment of lockdown effect in some states and overall India: A predictive mathematical study on COVID-19 outbreak. *Chaos Solitons Fract* 2020;139:110078.
5. Guessoum SB, Lachal J, Radjack R, Carretier E, Minassian S, Benoit L, *et al.* Adolescent psychiatric disorders during the COVID-19 pandemic and lockdown. *Psychiatry Res* 2020;291:113264.
6. Sivagurunathan C, Umadevi R, Rama R, Gopalakrishnan S. Adolescent health: Present status and its related programmes in India. Are we in the right direction? *J Clin Diagn Res* 2015;9:LE1-6.
7. Nebhinani N, Jain S. Adolescent mental health: Issues, challenges, and solutions. *Ann Indian Psychiatry* 2019;3:4.
8. Parenting Desk. Parents Worry as Kids' Screen Time Increases in Lockdown, Survey Reveals. *The Indian Express*; 2020.
9. Sinha M, Pande B, Sinha R. Impact of COVID-19 lockdown on sleep-wake schedule and associated lifestyle related behavior: A national survey. *J Public Health Res* 2020;9:1826.
10. Roy S, Tiwari S, Kanchan S, Bajpai P. Impact of Covid-19 Pandemic Led Lockdown on the Lifestyle of Adolescents and Young Adults. *MedRxiv*; 2020.

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