

## The Psychological Effects of COVID-19 Pandemic Related Lockdown in Children

In India, varying degrees of lockdown due to coronavirus disease 2019 (COVID-19) pandemic have been enforced in most states since late March, 2020, which has extended for more than four months now. Schools across India have closed and restrictions on public movement is in effect. Most children are forced to stay indoors because of this lockdown, which has significantly disrupted their routine and reduced social contact.

This prolonged indoor stay is likely to affect their psychological well-being in many ways. Restriction of movement, inability to indulge in physical outdoor sports activities, reduced social contact with peer group, monotonous daily routine and difficulty in being engaged can have a negative bearing on the child. The childhood psychological reactions to COVID-19 pandemic can be broadly classified into internalizing problems like anxiety, depression, withdrawn state and somatic complaints and externalizing problems like irritable states, aggression, disruptive and rule breaking behavioral responses. An Italian study done among children during COVID lockdown reported an increase in externalizing tendencies like irritability, intolerance to rules, whims and excessive demands [1]. A similar Spanish study showed increase in nervousness, worry, feeling of loneliness, boredom and anger which includes both internalizing and externalizing tendencies [2]. Lockdown also impaired the quality of sleep and sleep stabilization in children [3]. Quarantined Indian children were found to experience greater psychological distress like worry, helplessness and fear [4]. On the other hand, reduction in academic pressure and more time spent with family may also contribute to reduction in stress.

Our understanding about the psychological effects of COVID-19 lockdown in children is still evolving. Most of the available data are based on unvalidated, ad hoc questionnaire-based studies with poor external validity and have to be interpreted cautiously. More studies on this aspect are needed in order to understand and prevent psychological problems in children

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## Do All Children With Autoimmune Encephalitis Need Aggressive Immunotherapy?

Autoimmune encephalitis is increasingly being recognized in children in India, and the recent review was therefore timely [1]. Many centers have reported that autoimmune encephalitis as a group is more common than encephalitis caused by any single etiological agent like virus/bacteria [2]. They usually have an acute to subacute poly-symptomatic presentation [3].

Prompt immunotherapy in time gives good neurological outcomes in most of them. As antibody testing results takes few days, many clinico-laboratory criteria have been proposed for diagnosis of early possible/probable and seronegative autoimmune encephalitis so that treatment can be started

pending the results [4]. This puts the pediatrician under pressure to start immunomodulation after common infectious causes are ruled out. Which drugs to use for immunomodulation is not clear from the literature. Though many authors and guidelines advocate use of methylprednisolone pulse therapy (MP) with intravenous immunoglobulin (IVIG) as the initial modality of treatment, it is not clear whether they should be used simultaneously or sequentially [3]. If sequentially, after how many days of methylprednisolone therapy should IVIG be used is also not clear. Whether IVIG should be used in all or on the basis of clinical severity or response to MP is also unclear.

Like Guillain-Barre syndrome and many other diseases, there is a spectrum of severity of autoimmune encephalitis and all children may not need aggressive treatment with both MP and IVIG. While milder ones may be self-limiting, the mild to moderately severe ones may need just 2-3 cycles of MP and the severe ones may need more than one agent and chronic immunomodulation for longer duration. Most of the milder forms of autoimmune encephalitis may not reach the tertiary