

Internal clock, sleep and desynchronization of confined children and adolescents

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A biological clock, or internal clock, located in the brain controls our biological rhythms and the functioning of our body. This clock is under the control of genetic and external factors, the most important of which is exposure to light. Under normal living conditions, the internal clock is synchronized by the nycthemeral cycle and social life. When it is no longer in tune with the environment, the organism is out of sync because biological time (our clock) no longer corresponds to astronomical time (our watch).

A significant number of children and teenagers are out of sync, due to the abuse, often late at night, of various screens (computers, smartphones, tablets, etc...). This desynchronization is linked to an inappropriate night-time exposure to the blue line of the light spectrum found in the screens. This light slows down the secretion of melatonin, the sleep-facilitating hormone, and greatly disrupts the functioning of the clock, which no longer finds its usual reference points (light during the day, darkness at night). Clinically, this desynchronization is expressed by sleep disorders (which is delayed and shortened), mood disorders, appetite disorders, alertness disorders and persistent fatigue.

A good quality sleep is essential to a child's physical and mental health. A long-term sleep deprivation can create a sleep debt that leads to anxiety, depression and violent behaviour. The containment of children and adolescents, the cessation of regular activities, the careless use of screens, tablets and consoles, accentuate the phenomenon of desynchronization and increase its clinical signs.

In order to reduce these adverse effects of containment, the National Academy of Medicine recommends that parents:

- limit the use of consoles during the day and exclude their use in the hour before bedtime;
- do not expose children under the age of 3 to screens, including television;
- organize the day's activities according to a regular schedule;
- take advantage of the daily time of release from the confinement to encourage the child to exercise physically (physical exercise, walking; etc...);
- to be attentive to the tendency of adolescents to withdraw into themselves, a worrying sign revealing their discomfort, which may require medical care.