Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

working on these issues, with a view to accelerating opportunities to improve brain health outcomes.

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Lessons from individuals with Down syndrome during COVID-19

The COVID-19 pandemic presents particular challenges for people with intellectual disability.[1] Individuals with Down syndrome, the most common form of intellectual disability,[2] exhibit a higher prevalence of respiratory tract infections, immune dysfunction, chronic inflammation, early ageing, and comorbidities associated with COVID-19 risk leading to poorer clinical outcomes, but it is currently unknown to what extent they are more vulnerable to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection.[3] According to a survey, done by the Trisomy 21 Research Society, the number of SARS-CoV-2 infections in people with trisomy 21 substantially dropped after the first wave of infection between March and May 2020, and even after the resurgence of coronavirus infections in September 2020.

We suspect that the lower infection rates detected since Sept 1, 2020, in individuals with Down syndrome might be partly explained by certain behavioural and cognitive traits.[4] These traits include constancy, tenacity, and commitment to tasks that individuals have interiorised, which are not commonly reported in patients with other genetic syndromes associated with intellectual disabilities.[4] People with Down syndrome also share a tendency to imitate and repeat behaviour that might lead to ritualisation and perfectionism.[5] Therefore, the cognitive function pattern associated with this behavioural phenotype could promote compliance with recommended preventative measures against the spread of SARS-CoV-2. Finally, in our experience, individuals with Down syndrome show a high degree of commitment when they integrate habits relayed to them as important or beneficial. Of course, these notions cannot be extrapolated to people with Down syndrome with severe or profound intellectual deficit or dementia, or when the information related to the SARS-CoV-2 pandemic has not been adequately communicated. The success of individuals with Down syndrome in complying with the recommended measures depends on adequate intervention from both family members and health-care practitioners.

For more on the **survey by the Trisomy 21 Research Society** see https://www.t21rs.org/results-from-covid-19-and-down-syndrome-survey/

Individuals with Down syndrome might be teaching a quiet lesson to the rest of the population. The persistency, specifically in grooming and hygiene, shown by people with Down syndrome helps them to learn (through an appropriate channel) and adopt recommended protective measures against this infection. If our observation holds, the behavioural pattern presented by these individuals should serve as a useful reminder to the general population to avoid the spread of SARS-CoV-2.

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