# Raising Awareness about Adult Autism Spectrum Disorder

# Sensibilizando para a Perturbação do Espetro do Autismo no Adulto

**Keywords:** Attention Deficit Hyperactivity Disorder; Autistic Disorder; Neurodevelopmental Disorders; Transition to Adult Care **Palavras-chave:** Perturbação do Deficit de Atenção com Hiperatividade; Perturbação Autística; Perturbação do Neurodesenvolvimento; Transição para Assistência do Adulto

Dear Editor.

Martins Halpern et al<sup>1</sup> presented the experience of their specialized center while highlighting the challenges of diagnosing and treating autism spectrum disorders in early infancy. However, problems in the approach of these and other neurodevelopmental disorders are not limited to the early stages of life. Their work prompted us to briefly highlight challenges arising in other phases of the life cycle and raise awareness of this condition.

Patients with neurodevelopmental disorders, including autism spectrum disorder (ASD) and attention deficit and hyperactivity disorder, are often lost in the transition from children and young people's healthcare services to adult services.<sup>2,3</sup> Patients who are not lost in this transition may prove even more challenging, since most have no previously known psychiatric history or a previously established diagnosis.3 Some individuals who suffer from these disorders present milder symptoms and often remain undiagnosed until adulthood. When eventually presenting to adult psychiatry services, these diagnoses are often also overlooked, with patients frequently diagnosed with different personality disorders (including schizoid and borderline personality disorder) or with other psychiatric comorbidities (depression, stress-related and anxiety disorders), and therefore deprived of specific psychosocial interventions or evidence-based treatments directed at the particular needs of patients with autism related disorders.2.4 Interestingly, individuals with high functioning ASD present more often to psychiatric services and yet they remain without a proper diagnosis until later stages in life.3

Overall, available national clinical recommendations provide general advice suggesting the assessment of adults presenting with inadequate social interaction, cognitive and behavioural rigidity, restricted interests and previous medi-

cal history of neurodevelopmental disorders. 1,5 Although it is useful, the translation of these general principles in everyday clinical practice is not as straightforward as it may seem. Challenges include the clinical heterogeneity of ASD, ranging from complex genetic conditions with learning disability to high functioning individuals who adapted and developed strategies to overcome autistic deficits.<sup>3,4</sup> Conceptualization of neurodevelopmental disorders, their neurobiology and different ways in which they affect functioning, quality of life and overall medical care, need to be considered and properly studied in order to ensure that minimal standards in the provision of care to individuals are met, including a smoother and well planned transition from child to adult healthcare services. Specific issues to be considered include the diagnostic challenges, psychiatric comorbidities, and lack of social support (reduced number of institutions, aging family caregivers, etc.).

The authors work in an institution with services providing care to adolescents and young adults in transition to adult psychiatric care (both in inpatient units and outpatient clinics), as well as a specialized outpatient clinic for patients with adult attention deficit disorder and neurodevelopmental disorders. This experience highlights the shortcomings felt in the care previously provided to these patients. The important message is that, although much has advanced since the initial descriptions of these disorders, there is still much to be done. It is essential to raise awareness and advocate for the specific medical and societal needs of adult individuals who suffer from the effect of these symptoms in their daily life, with profound impact in their general health and overall well-being.

## **AUTHORS CONTRIBUTION**

TT: Design, draft of the paper, critical review.

JS: Critical review.

# **COMPETING INTERESTS**

The authors have declared that no competing interests exist.

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### **REFERENCES**

- Martins Halpern C, Caldeira da Silva P, Costa D, Nascimento MJ, Mesquita Reis J, Martins MT, et al. A perturbação do espetro do autismo na primeira infância: o modelo do Centro de Estudos do Bebé e da Criança de Avaliação Diagnóstica e Intervenção Terapêutica. Acta Médica Port. 2021 (in press). doi: 10.20344/amp.13397.
- Lord C, Elsabbagh M, Baird G, Veenstra-Vanderweele J. Autism spectrum disorder. Lancet. 2018;392:508-20.
- Barahona-Corrêa B. The high-functioning group: high-functioning autism and Asperger syndrome in adults. In: Barahona Corrêa B, van
- der Gaag RJ, editors. Autism Spectrum Disorders in Adults. New York: Springer International Publishing; 2017. p.129-78.
- Swetlik C, Earp SE, Franco KN. Adults with autism spectrum disorder: Updated considerations for healthcare providers. Cleve Clin J Med. 2019;86:543-53.
- Howes OD, Rogdaki M, Findon JL, Wichers RH, Charman T, King BH, et al. Autism spectrum disorder: consensus guidelines on assessment, treatment and research from the British Association for Psychopharmacology. J Psychopharmacol. 2018;32:3-29.

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The EU Digital COVID Certificate: Should We Differentiate Between Previously Infected and Fully Vaccinated People?

Certificado Digital COVID da EU: Devemos Distinguir as Pessoas Previamente Infetadas das que Têm Vacinação Completa?

Keywords: COVID-19; COVID-19 Vaccines; European Union;

Mass Vaccination; SARS-CoV-2

Palavras-chave: COVID-19; SARS-CoV-2; Vacinação em Massa;

Vacinas contra COVID-19; União Europeia

The EU Digital COVID Certificate will be a proof that a person has been vaccinated against COVID-19, received a negative test result, or recovered from COVID-19. The EU has set the maximum validity period of the certificate of recovery at 180 days. There is no maximum validity foreseen for vaccination certificates.<sup>1</sup>

What is the evidence behind this decision?

Previously infected individuals have very low risk for reinfection at least six to eight months after the primary infection, as observed both in healthcare workers (HCW) and in the general population. And those who get infected are mainly asymptomatic or have non-severe symptoms <sup>2-5</sup>

A study performed in England with a population of HCW has found that those with previously positive SARS-CoV-2 antibodies had a 99.8% lower risk of new infection compared to participants with previously negative serology, when restricting reinfections to confirmed and probable cases 4

The protection period conferred from previous infection is being extended as new evidence is available with the progression of the pandemic. A study with HCW in Ohio suggests that SARS-CoV-2 infection may provide protection against reinfection for 10 months or longer.<sup>5</sup> More recently, Turner *et al* have demonstrated that SARS-CoV-2 infection induces long-lived bone marrow plasma cells and memory B cells in humans.<sup>6</sup>

The progressive decay in antibody titers that has been documented is observed in other infections after vaccination and does not necessarily mean a waning of protection to reinfection. T-cell mediated immunity (T-CD4+ and T-CD8+ specific) seems more important than neutralizing antibodies for the clinical impact of the infection.<sup>7</sup>

The protection conferred was observed regardless of the clinical severity of the primary infection. 4.5 In fact, the immunological priming is the same. Both symptomatic and asymptomatic previously infected people showed a similar, immediate and robust antibody production after a subsequent administration of one vaccine dose 8

We already have good immunologic and clinical evidence of long-lasting protection against reinfection in patients who recovered from infection.

What do we know about vaccinated people?

The best results published regarding vaccine effectiveness were those of Israel, with a follow-up period of seven days to three months after the second dose of the mRNA BNT162b2 vaccine. The protection was 92% against infection and 94% against symptomatic infection.<sup>9</sup>

Regarding efficacy against variants of concern (VOCs), no better protection is expected to be achieved by people who had been immunized through vaccination than by those who recovered from infection, since the immunological response is directed towards multiple viral antigens and not just the spike protein. In fact, a recent retrospective cohort study from Israel showed that the immunity acquired through infection conferred a better and longer lasting protection against infection, symptomatic disease and hospitalization caused by the Delta variant of SARS-CoV-2, compared to the BNT162b2 two-dose vaccine-induced immunity.

The answer to the question whether the EU Digital COVID Certificate should differentiate between previously infected and fully vaccinated people should rely on the fact that, until now, previous infection has proved to be better and longer lasting than the vaccines.

So why decide in the opposite way?

#### PROTECTION OF HUMANS AND ANIMALS

The author declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in 2013.

#### **DATA CONFIDENTIALITY**

The author declares that he followed the protocols in use at their working center regarding patients' data publication.