

# Treating patients with allergic diseases in the Brazilian Unified Health System – Letter from São Paulo

Assistência a pacientes com doenças imunoalérgicas no Sistema Único de Saúde brasileiro – Carta de São Paulo

Faradiba Sarquis Serpa<sup>1</sup>, Luane Marques de Mello<sup>2</sup>, Phelipe dos Santos Souza<sup>3</sup>, Joseane Chiabai<sup>4</sup>, Eduardo Costa Silva<sup>5</sup>, Yara Arruda Marques Mello<sup>6</sup>, José Luiz Magalhães Rios<sup>7</sup>, Marilyn Urrutia-Pereira<sup>8</sup>, Eliane Miranda da Silva<sup>9</sup>, Marta de Fátima Rodrigues da Cunha Guidacci<sup>10</sup>, Emanuel Sávio Cavalcanti Sarinho<sup>11</sup>, Norma de Paula M. Rubini<sup>12</sup>, Dirceu Solé<sup>13</sup>

#### **ABSTRACT**

The Brazilian Unified Health System covers all levels of health care and guarantees full, universal and free access for the entire population. The demographic and epidemiological transitions observed in recent decades have led to a higher prevalence of allergic diseases. In this context, implementing health policies to benefit these patients has become a challenge. To discuss health care for patients with allergic and immunological diseases in Brazil, the Brazilian Association of Allergy and Immunology (ASBAI) held a forum in São Paulo on August 26, 2022 called "Treating Patients with Allergic Diseases in the Unified Health System". The event's panels included members of ASBAI, representatives of the federal government, the attorney general's office, patients, and health professionals from various services with experience in successful programs for patients with allergic diseases. It was concluded that there are still many unmet health care needs for Brazilians with allergic and immunological diseases. ASBAI is contributing to the organization, implementation, and maintenance of care for these patients within the scope of the Unified Health System.

**Keywords:** Allergy, immunology, Brazilian Unified Health System, management, public health.

### **RESUMO**

O Sistema Único de Saúde (SUS) abrange todos os níveis de atenção à saúde e garante acesso integral, universal e gratuito para toda a população brasileira. As transições demográfica e epidemiológica observadas nas últimas décadas trouxeram um cenário de maior prevalência das doenças imunoalérgicas. Nesse contexto, a implementação de políticas de saúde voltadas à assistência à saúde dessa população tornou-se um desafio. Com o objetivo de discutir a atenção à saúde dos pacientes com doenças alérgicas e imunológicas no Brasil, a Associação Brasileira de Alergia e Imunologia (ASBAI) realizou em 26 de agosto de 2022, na cidade de São Paulo, o Fórum sobre a Assistência a Pacientes com Doenças Imunoalérgicas no SUS. O evento foi estruturado no formato de painéis e contou com a participação de membros da ASBAI e representantes da gestão pública federal, do Ministério Público, de sociedade de pacientes e profissionais de saúde de diversos serviços com experiência em programas e projetos bem sucedidos na assistência a pacientes com doenças imunoalérgicas. Após a discussão, concluiu-se que ainda existem muitas necessidades não atendidas em relação à atenção à saúde da população com doenças alérgicas e imunológicas no Brasil. A ASBAI tem trabalhado no sentido de contribuir para organizar, implantar e manter a assistência a estes pacientes no âmbito do SUS.

**Descritores:** Alergia, imunologia, sistema único de saúde, gestão, saúde pública.

Submitted: 10/29/2022, accepted: 10/30/2022. Arq Asma Alerg Imunol. 2022;6(4):427-31.

<sup>1.</sup> Escola Superior de Ciências da Santa Casa de Misericórdia de Vitória- Vitória, ES, Brazil. Associação Brasileira de Alergia e Imunologia (ASBAI), Diretora de Políticas de Saúde, São Paulo, SP, Brazil.

Faculdade de Medicina de Ribeirão Preto, Universidade de São Paulo, Departamento de Medicina Social - Ribeirão Preto, SP, Brazil. ASBAI, Comissão de Políticas de Saúde, Medicina Social, São Paulo, SP, Brazil.

<sup>3.</sup> Universidade do Vale do Itajaí - Itajaí, SC, Brazil. ASBAI, Comissão de Políticas de Saúde, São Paulo, SP, Brazil.

- 4. Universidade Federal do Espírito Santo, Departamento de Pediatria Vitória, ES, Brazil. ASBAI, Departamento Científico de Alergia na Infância e na Adolescência e Comissão de Políticas de Saúde, São Paulo, SP, Brazil,
- 5. Universidade do Estado do Rio de Janeiro, Departamento de Medicina Interna Rio de Janeiro, RJ, Brazil. ASBAI, Comissão de Políticas de Saúde e Departamento Científico de Asma, São Paulo, SP, Brazil.
- 6. Complexo Hospitalar Edmundo Vasconcelos, Serviço de Alergia e Imunologia Clínica. ABRASP, Departamento de Alergia São Paulo, SP, Brazil. ASBAI, Comissão de Políticas de Saúde, São Paulo, SP, Brazil.
- 7. Faculdade de Medicina de Petrópolis, Curso de Especialização em Alergia e Imunologia Petrópolis, RJ, Brazil. ASBAI, Comissão de Políticas de
- 8. Faculdade de Medicina da Universidade Federal do Pampa Uruguaiana, RS, Brazil. ASBAI, Comissão de Políticas de Saúde.
- 9. Universidade Federal do Estado do Rio de Janeiro, Curso de Pós-graduação em Alergia e Imunologia Rio de Janeiro, RJ, Brazil. ASBAI, Comissão de Políticas de Saúde, São Paulo, SP, Brazil.
- 10. Hospital de Base, Departamento de Pediatria Brasília, DF, Brazil. ASBAI, Comissão de Políticas de Saúde, São Paulo, SP, Brazil.
- 11. Universidade Federal de Pernambuco, Departamento de Pediatria Recife, PE, Brazil. ASBAI, Presidente Gestão 2021-22, São Paulo, SP, Brazil.
- 12. Escola de Medicina e Cirurgia da UFRJ. Disciplina de Alergia e Imunologia Rio de Janeiro, RJ, Brazil. ASBAI, Diretora Científica, São Paulo, SP, Brazil.
- 13. Escola Paulista de Medicina, UNIFESP. Disciplina de Alergia, Imunologia Clínica e Reumatologia. ASBAI, Diretor de Pesquisa, São Paulo, SP, Brazil.

#### Introduction

The Brazilian Unified Health System (SUS) is one of the largest and most complex public health systems in the world, covering all levels, from primary care to organ transplants, guaranteeing full, universal, and free access to health care for the entire population. 1,2

Since its establishment in 1990, SUS has progressively expanded the health services offered to the population<sup>2</sup>. However, in recent decades the accelerated demographic transition has led to an increasing proportion of older adults, resulting in an epidemiological transition involving a higher prevalence of chronic diseases,3 including immunoallergic diseases.

To address these changes, in 2011 the Brazilian Ministry of Health initiated a Strategic Action Plan for Combating Chronic Noncommunicable Diseases to promote effective public policies for the prevention and control of these diseases and their risk factors. The plan covers the four main chronic disease groups (cardiovascular disease, cancer, chronic respiratory disease, and diabetes). However, the only recognized chronic respiratory disease of allergic etiology was asthma, included in the proposal "to structure and strengthen notification of severe asthma cases".4

Globally, the epidemiological transition has been accompanied by great technological advances in diagnosing and treating immunoallergic diseases, which have allowed earlier and more accurate diagnosis and treatment with targeted therapies for severe and complex cases. However, uniform access to these technologies in Brazil, one of the largest countries in the world, is hampered by territorial, populational, and funding issues. To ensure the health

of the Brazilian population by reducing morbidity and mortality from immunoallergic diseases, care goals must be determined and health surveillance must be increased.

Such actions could also significantly improve the use of human and financial resources in SUS. Both the Strategic Action Plan for Combating Chronic Noncommunicable Diseases and the optimization of human and financial resources in health care are objectives of the United Nations' Sustainable Development Goal (Agenda 2023) to ensure a healthy life and promote well-being for people of all ages.5

Since SUS was founded, little progress has been made in the standardization of care for patients with immunoallergic diseases. Although the incorporation of new technologies has not kept pace with recent developments, the following should be mentioned: the second update of the 2021 Clinical Protocol and Therapeutic Guideline for Asthma included 2 new technologies for severe cases; a clinical protocol and therapeutic guidelines for cow's milk protein allergy, as well as an oral provocation test for patients ≤ 2 years of age have been implemented; and a neonatal screening test for primary immunodeficiencies, currently called inborn errors of immunity, has been incorporated. Primary care asthma treatment guidelines have also been published recently.

However, other immunoallergic diseases remain "invisible" to SUS, especially (1) anaphylaxis, which involves the risk of death if not treated properly, (2) chronic urticaria, and (3) moderate and severe atopic dermatitis, which greatly compromise quality of life

and incur considerable health costs, both direct and indirect. Studies conducted in several countries, including Brazil, have confirmed the high cost of these and other immunoallergic diseases, such as asthma and food allergies, to the health system. 6-18 In addition. for rare diseases, including inborn errors of immunity. diagnostic and treatment resources are scarce outside of centers of excellence and the southern and southeastern regions of the country. Thus, health policies must establish a support network that includes early diagnosis by primary care professionals and the establishment of treatment flow processes.<sup>19</sup>

To fill in treatment gaps, local asthma programs have been developed in recent decades and have led to occasional improvements in patient care, although many have been dismantled for political or other reasons. Specialist societies have come together to demand the creation of a National Asthma Program with standardized treatment flow and access, but they were unsuccessful.20 Similarly, a request by the Brazilian Association of Allergy and Immunology to classify anaphylaxis as a notifiable condition was rejected. Regarding atopic dermatitis and chronic urticaria, standardizing care through the development of a clinical protocol and therapeutic guidelines would facilitate adequate diagnosis and treatment and reduce judicial impediments to obtaining them.

In this context, the Brazilian Association of Allergy and Immunology, whose mission is to strengthen professional practice (both public and private) within the specialty, held a forum to discuss immunoallergic disease treatment in SUS (itinerary shown in Figure 1). The event brought together representatives of different institutions, who reviewed the unmet needs in our specialty and discussed the importance of planning care actions and health surveillance for immunoallergic diseases.

A proposal emerged from the Forum for networking between representatives of the Brazilian Association of Allergy and Immunology, the National Council of State Health Secretaries, the National Council of Municipal Health Secretaries, patient representatives, and representatives of the Public Prosecutor's Office to develop health policies for immunoallergic disease treatment. Networking was considered a viable means of collaborating to achieve a common goal.1 After the discussion, the following strategies were proposed:

mapping current treatments for immunoallergic diseases in different regions of the country;

- strengthening primary care for immunoallergic diseases through continuing education for health teams:
- expanding the care network by developing specialized outpatient clinics in SUS and associated networks:
- implementing sentinel registry/surveillance of chronic and/or severe allergic diseases;
- adding questionnaires on asthma and atopic dermatitis to the Chronic Disease Risk and Protective Factors Telephone Survey system<sup>21,22</sup>;
- reviewing and updating SUS' list of immunoallergic diseases;
- promoting discussion forums on successful municipal and state experiences that can be used as models for different scenarios.

#### Final considerations

There are many unmet health needs among SUS users with allergic and immunological diseases. The board of directors and committees of the Brazilian Association of Allergy and Immunology have been actively positioning themselves to positively influence decisions to benefit this entire community of patients. The Forum unanimously agreed that networking could help promote health policies that organize, implement, and maintain care for SUS patients with immunoallergic diseases. The great value of a universal health system like SUS was also recognized by all, which, despite chronic underfunding and other difficulties, is ensuring the right to health for the entire population.

# **Acknowledgements**

The authors would like to thank the moderators and speakers who participated in the "Treating Patients with Allergic Diseases in the Unified Health System" Forum: Alessandro Aldrin Pinheiro Chagas, Bárbara Corrêa Krug, Dirceu Solé, Ekaterini Simões Goudouris, Emanuel Savio Cavalcanti Sarinho, Faradiba Sarquis Serpa, Luane Marques de Mello, Lucila Camargo Lopes Oliveira, Maria Clara Mendonça Perim, Marta de Fátima Rodrigues da Cunha Guidacci, Norma de Paula Motta Rubini, Paulo Camargos, Wanderson de Oliveira and Yara A. Marques Figueiredo Mello.

## Section 1 - The "epidemic" of immunoallergic diseases and the Unified Health System

- The allergy and immunology specialty in Brazil in the 21st century
- . The importance of the Unified Health System: understanding the principles that guide it
- The challenges to implementing care for allergic patients in the public health system
- · Allergic diseases and new technologies: how far have we advanced in the Unified Health System?
- Enforcement of user rights and the role of public agencies
- · The economic impact of chronic respiratory diseases in Brazil

## Section 2 - Assessing the present and preparing for the future

- Childhood asthma: successful pioneering programs
- · Anaphylaxis: is notification the way?
- Dermatological allergies: how can we provide visibility and implement treatment?
- Food allergies: is current policy sufficient?
- · Inborn errors of immunity: the importance of treatment flow
- The experience of reference centers in the development of clinical protocols

### Figure 1

Itinerary of the "Treating Patients with Allergic Diseases in the Unified Health System" Forum

## References

- 1. Mendes EV. Desafios do SUS. Brasilia, DF. CONASS, 2019, 869p. Available at: https://docs.bvsalud.org/biblioref/2020/08/1104190/ desafios-do-sus.pdf. Accessed on: 10/20/2022.
- 2. MartinsTCF, Silva JHCM, Máximo GC, Guimarães RM. Transição da morbimortalidade no Brasil: um desafio aos 30 anos de SUS. Ciênc Saúde Coletiva, 2021;26(10):4483-4496, doi.org/10.1590/1413-812320212610.10852021.
- 3. Duarte EC, Barreto SM. Transição demográfica e epidemiológica: a Epidemiologia e Serviços de Saúde revisita e atualiza o tema. Epidemiol Serv Saúde. 2012;21(4):529-32. doi.org/10.5123/S1679-49742012000400001.
- Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Análise em Saúde e Vigilância de Doenças Não Transmissíveis. Plano de Ações Estratégicas para o Enfrentamento das Doenças Crônicas e Agravos não Transmissíveis no Brasil 2021-2030. Available at: https://www.gov.br/saude/pt-br/centraisde-conteudo/publicacoes/publicacoes-svs/doencas-cronicas-naotransmissiveis-dcnt/09-plano-de-dant-2022\_2030.pdf. Accessed on: 10/20/2022.
- 5. Organização das Nações Unidas (ONU). Objetivos de Desenvolvimento Sustentável da ONU. Available at: https://brasil. un.org/pt-br/sdgs. Accessed on: 10/20/2022.
- 6. Drucker AM, Wang AR, Li WQ, Sevetson E, Block JK, Qureshi AA. The Burden of Atopic Dermatitis: Summary of a Report for the National Eczema Association. J Invest Dermatol. 2017:137(1):26-30. doi: 10.1016/j.jid.2016.07.012.
- 7. Igarashi A, Yuasa A, Yonemoto N, Kamei K, LoPresti M, Murofushi T, et al. A Systematic Literature Review of Economic Evaluations and Cost Studies of the Treatment of Psoriasis, Atopic Dermatitis, and Chronic Urticaria. Dermatol Ther (Heidelb). 2022;12(8):1729-51. doi: 10.1007/s13555-022-00774-2.

- 8. Weller K, Maurer M, Grattan C, Nakonechna A, Abuzakouk M, Bérard F, et al. ASSURE-CSU: a real-world study of burden of disease in patients with symptomatic chronic spontaneous urticaria. Clin Transl Allergy. 2015;5:29. doi: 10.1186/s13601-015-0072-9.
- 9. Ensina LFC, Sano F, Silva EK, Rubini NPM, Solé D. Omalizumabe no tratamento da urticária crônica espontânea: análise de custoefetividade e impacto orçamentário. Arq Asma Alerg Imunol. 2019;3(1):51-63. doi: 10.5935/2526-5393.20190010.
- 10. Santos PFAM, Kuschnir FC, Dias GAC, Ruiz VP, Junior SCG, Silva ECF. Carga econômica da urticária crônica no Brasil: um estudo de vida real no período de 1 ano. Arq Asma Alerg Imunol. 2020;4(4):447-57. doi: 10.5935/2526-5393.20200067.
- 11. Guest JF, Yang AC, Oba J, Rodrigues M, Caetano R, Polster L. Relative cost-effectiveness of using an extensively hydrolyzed casein formula in managing infants with cow's milk allergy in Brazil. Clinicoecon Outcomes Res. 2016;8:629-639. doi: 10.2147/CEOR. S113448.
- 12. Bilaver LA, Chadha AS, Doshi P, O'Dwyer L, Gupta RS. Economic burden of food allergy: A systematic review. Ann Allergy Asthma Immunol. 2019;122(4):373-380.e1. doi: 10.1016/j. anai.2019.01.014.
- 13. Alsaggaf A, Murphy J, Leibel S. Estimating cost-effectiveness of confirmatory oral food challenges in the diagnosis of children with food allergy. Glob Pediatr Health. 2019;6:2333794X19891298. doi: 10.1177/2333794X19891298.
- 14. Sullivan PW, Ghushchyan VH, Slejko JF, Belozeroff V, Globe DR, Lin SL. The burden of adult asthma in the United States: evidence from the Medical Expenditure Panel Survey. J Allergy Clin Immunol. 2011;127(2):363-369.e1-3. doi: 10.1016/j.jaci.2010.10.042.
- 15. Accordini S, Corsico AG, Braggion M, Gerbase MW, Gislason D, Gulsvik A, et al. The cost of persistent asthma in Europe: an international population-based study in adults. Int Arch Allergy Immunol. 2013;160(1):93-101. doi: 10.1159/000338998.

- 16. Stirbulov R, Lopes da Silva N, Maia SC, Carvalho-Netto E, Angelini L. Cost of severe asthma in Brazil-systematic review. J Asthma. 2016;53(10):1063-70. doi: 10.3109/02770903.2016.1171338.
- 17. Costa E, Caetano R, Werneck GL, Bregman M, Araújo DV, Rufino R. Estimated cost of asthma in outpatient treatment: a real-world study. Rev Saude Publica. 2018;52:27. doi: 10.11606/S1518-8787.2018052000153.
- 18. Sano F, Ensina LFC, Rubini NPM, Solé D. Avaliação de custoefetividade e impacto orçamentário do tratamento adicional de omalizumabe em pacientes com asma alérgica grave não controlada. Arq Asma Alerg Imunol. 2019;3(1):37-50. doi: 10.5935/2526-5393.20190009.
- 19. Serpa FS, Cruz AAS, Neto AC, Silva ECF, Franco JM, Mello JML, et al. O atendimento médico de pacientes com doenças imunoalérgicas no Brasil: reflexões e propostas para a melhoria - Carta de Belo Horizonte. Arq Asma Alerg Imunol. 2017;1(4):327-34.
- 20. Silva LC, Freire LM, Mendes NF, Lopes AC, Cruz A. Carta de Salvador. J Pneumol. 2002;28(suppl 1):S2. doi: 10.1590/S0102-35862002000700002.

- 21. Valle SO, Kuschnir FC, Solé D, Silva MA, Silva RI, Da Cunha AJ. Validity and reproducibility of the asthma core International Study of Asthma and Allergies in Childhood (ISAAC) written questionnaire obtained by telephone survey. J Asthma. 2012 May;49(4):390-4.
- 22. Oliveira EF, Penedo C, Valle SOR, Kuschnir FC. Validation and reproducibility of the International Study of Asthma and Allergies in Childhood (ISAAC) Written Atopic Eczema Questionnaire for telephone survey in children aged 6-7 years. An Bras Dermatol. 2022 Mar-Apr;97(2):173-8.

No conflicts of interest declared concerning the publication of this

Corresponding author: Faradiba Sarquis Serpa E-mail: faradibasarquis@uol.com.br