

## The resilience of Brazilian Unified National Health System in the context of the COVID-19 pandemic: how to strengthen?

Resiliência do Sistema Único de Saúde no contexto da pandemia de COVID-19: como se fortalecer?

Resiliencia del Sistema Único de Salud brasileño en el contexto de la pandemia del COVID-19: ¿cómo fortalecerse?

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The frequent impacts caused by several epidemics increased interest in the resilience of health systems<sup>1</sup>. During the COVID-19 pandemic, it became evident that health systems must become more resilient<sup>2</sup>. Although this debate has taken a central role in the global health discourse, there is a lack of clarity on what resilience really means<sup>3</sup>. Thus, it is necessary to broaden the debate on the subject by identifying actions capable of strengthening the health systems.

Regarding the Brazilian Unified National Health System (SUS), resilience has been little analyzed. Due to the pandemic, the discourse on the need to strengthen the Brazilian health system gained notoriety in social, academic, and political circles<sup>4</sup>. Few analyses, however, focus on the path of resilience of the SUS in the face of different types of threats. This article aims to discuss the resilience of the SUS during the COVID-19 pandemic.

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### **Understanding shock in relation to resilience**

Shocks are external factors that causes extreme stress and challenges to a system<sup>5</sup>. Stressors can, therefore, unbalance the dynamics of the health system, affecting the care offered. Shocks increase existing vulnerabilities, while creating new weaknesses within both the health system and the living conditions of the overall population.

Shocks have been related to the emergence of infectious diseases epidemics, such as Ebola, Zika, and, more recently, COVID-19. Subsequently, shock has also been related to natural disasters or climatic events<sup>6</sup>.

For systematization purposes, I consider that shocks within a health system can be categorized into three types: acute; chronic; and political of an intentional nature. The first concerns shock as an event that is sudden and with profound effect<sup>5</sup>. The classic examples are the epidemics that have arisen in recent years and also natural and environmental disasters, such as tsunamis, earthquakes, and the collapsing of dams.

The second is characterized by daily challenges experienced in health systems<sup>6</sup>. Structural difficulties, continuous underfunding, fragile technical capacity, and staff shortage are some examples of chronic shocks that perpetuate the vulnerabilities of health systems.



The third typology consists of tensions triggered by the implementation of new restrictive policies or reforms. This type is called an intentional shock <sup>7</sup> and has great potential to generate instabilities within the system <sup>1</sup>. New modes of governance, financing mechanisms, and service provision can cause disruption and affect the performance of health systems <sup>5</sup>.

Notably, the risk and frequency of shocks are increasing globally, whether by global warming, new epidemics, or geopolitical changes <sup>8</sup>. Thus, resilience is a fundamental factor to strengthen health systems for the daily and emerging challenges.

## Resilience in health systems

The concept of resilience originates from Engineering and Construction with the sense of returning to the original state <sup>1</sup>. Such perspective, when used in the scope of health systems, restricts the understanding to a system ability to recover from an abrupt shock, such as an infectious disease outbreak. Fridell et al. <sup>6</sup> emphasize the limitation of this approach since it considers the system as a strictly linear process and assumes that the context before the shock is the optimal state to which one should return. Thus, resilience is presented only as an ability to absorb the impacts of shock and continue to provide services as before.

Broader definitions consider that resilience should go beyond the ability to absorb disturbances or to seek to return to its original state. Kruk et al. <sup>3</sup> suggest that the resilience of a health system involves the ability to transform while also improving itself in the face of adverse conditions. Based on this perspective, resilience is much more than a return, it means, above all, evolution.

Adaptive and transformative capabilities have been incorporated into the interpretations of resilience to make the system more prepared for present and future challenges. Blanchet et al. <sup>9</sup> consider that resilience should involve absorption, adaptation, and transformation capabilities, while maintaining control over its structure and functions.

Another widely used definition considers resilience as the capacity of actors, institutions, and populations to prepare and respond to crises, to maintain the functions of the health system and, based on the lessons learned, to reshape the structure and organization of the system <sup>3</sup>. Thus, a relevant element to build resilience is the possibility of learning from shocks. Hanefeld et al. <sup>5</sup> highlight that resilience should involve learning from the past and preparing for the future.

Considering that, we cannot ignore that health systems may become more or less resilient depending on the choices of political actors, on the established social protection models, and on the mobilization of the civil society to defend healthcare. Topp <sup>7</sup> emphasizes that resilience should not be seen as an apolitical result, synonymous with a natural and consensual process. She also emphasize that resilience is always determined by the context of the actors' interests and intentions and by the ways in which they mobilize their resources. Thus, the scope and robustness of the functions of a health system are determined, above all, by the established power relations.

## Resilience in SUS during the COVID-19 pandemic

Thinking about resilience within the SUS is, first and foremost, thinking about the sustainability and expansion of the system. It is not acceptable to refer to resilience only in the sense of return, since it is impossible to return to the form of care and health surveillance of the pre-pandemic period. New needs arose and prevalent diseases intensified <sup>10</sup>. We must understand resilience in the SUS as a way to transform the system to an expanded and improved state.

COVID-19 cannot be analyzed solely as an acute and intense shock. Before the pandemic, the SUS experienced conditions typical of the other two types of shocks. Conditions of underfunding, absence of a personnel policy, and susceptibilities to momentary political conveniences, among other aspects, express a state of chronic shock that accompanies the SUS since its genesis. As an aggravating factor, from 2017 on, the system also faced intentional political shock. Programs of macrostructural adjustments and reforms in the health field <sup>11</sup> constitute stressors that causes major effects.

The COVID-19 pandemic in Brazil constitutes a shock that added to other shocks. Thus, the severity of the current situation and the large-scale social and health threats are evidenced. This situation exposes the great challenge of how to provide resilience to the SUS during a pandemic.

The analyses on resilience in the SUS, during the pandemic, show situations of relative competence to absorb impacts and also relevant failures. To Massuda et al.<sup>12</sup>, the broad health surveillance system, the scope of the care network, and the expansion of emergency services express the resilience of the SUS. In turn, the fragile governance, the omissive performance of the Federal Government, and the constant underfunding, among other factors, constitute obstacles to its scope.

A study conducted on the maintenance of non-COVID-19 related health services showed a significant reduction in the services provided by the SUS in 2020, such as medical consultations (-42.5%), low- and medium-complexity surgeries (-59.7%), and transplants (-44.7%)<sup>13</sup>. The discontinuity of these offered services indicate the fragile resilience of the system. In turn, the SUS also demonstrated positive elements of resilience by reaching, at the end of 2021, more than 70% of the population fully vaccinated, even facing the Brazilian president's rhetoric against vaccination<sup>13</sup>.

Even with the advances achieved, we can observe that Brazil faced the pandemic with the SUS in a fragile state and with less resilience than it could<sup>12</sup>. According to Bigoni et al.<sup>13</sup>, the defunding and disruption of collaborative management between governmental management levels undermines the functionality of SUS and weakens the country's historical resilience to dealing with new pandemics.

Thus, I present some brief reflections aimed at making the SUS resilient and responsive in a pandemic and post-pandemic context. I use as reference the health system structuring blocks model proposed by the World Health Organization (WHO)<sup>14</sup>. This model has been widely used for resilience analysis in several countries<sup>2</sup> and can also guide the development of resilience within the SUS. It is a comprehensive analytical framework composed of six functions: provision of health services, workforce, information systems, medicinal and strategic products, financing, and leadership and governance.

The provision of health services should assume a comprehensive character, focused on integrality. The pandemic has shown that the proper structuring of services, at all levels, is essential for coping with crises. Primary health care, secondary services, hospital care, and health surveillance must expand their capabilities and integrate their action.

The workforce is a valuable asset of the SUS. However, the pandemic reiterated the persistent precariousness of working conditions and the healthcare training process. Structuring the workforce presupposes the resumption of the debate about national careers within the SUS and the re-establishment of the national policy of continuing education.

Early identification of shock and the basis for political decision-making depends on timely and reliable information. SUS information systems still have problems related to quality and low usage. Overcoming the fragmentation of information systems and improving the quality and availability of information are essential elements to the resilience of the SUS.

The supply of medicines, equipment, and other products is a strategic condition for the adequate provision of health services. The pandemic taught about the risks of depending on technology and on the manufacture of essential health products. It is necessary to advance the consolidation of the medical-industrial health complex to ensure the provision of supplies and equipment during crisis and regular activities of the SUS.

We cannot talk about resilience without ensuring stable and sufficient financial resources. Chronic underfunding of the SUS threatens the performance of all other functions and constitutes a serious aggravating factor in crisis. Fiscal restraints, such as the *Constitutional Amendment n. 95*, must be revoked. I emphasize the need to form a great social pact to establish the stable financing of the Brazilian health system as a State policy.

Finally, I emphasize that governance and leadership mechanisms must be strengthened to achieve resilience. Among other aspects, the SUS has peculiarities related to the Brazilian federative pact, the great socio-regional inequalities, the multiplicity of providers, and the strong interference with management mechanisms. It is necessary to advance toward the professionalization of management and toward the development of governance mechanisms based on transparency, equity, and public control with social participation.

## Additional information

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