

Profile

Daniela de Souza: overcoming adversities to beat sepsis in Brazil



See Series page 695 For ILAS see https://ilas.org.br For the SPREAD-PED study see Articles Lancet Child Adolesc Health 2021; 5: 873-81

Daniela de Souza never quite knows how to respond when Alice, her daughter, asks about her career. "Alice is always asking, 'why did you become a doctor, why did you want to work with children?', and I do not have an answer for her. It is not something I ever thought about—since I was a young child, I just knew I would be a doctor and I just knew I would be a paediatrician", said de Souza, a paediatric intensivist at the University of São Paulo and Hospital Sírio Libanês in São Paulo, Brazil, and President of the Latin American Institute for Sepsis (ILAS).

de Souza's parents certainly influenced her decision to go into medicine. She grew up in a small town in Minas Gerais, in the Brazilian countryside where her mother taught at a primary school. "My parents did not have the chance to go on to university, but they really valued education, and they taught us to value it too. It is the key to success, after all. My father especially was always reading and studying. He wanted to be a physician, but the opportunity was not there. He was very happy that my brother and I both became doctors", de Souza told *The Lancet Child & Adolescent Health*.

It is much easier for de Souza to answer why she decided to specialise in paediatric sepsis. "It is a fascinating condition—heterogeneous, difficult to recognise but easy to treat, at least if you diagnose it early enough", she explained. More than 8000 Brazilian children die from sepsis in the paediatric intensive care unit every year. "The tragedy is that a lot of these deaths are preventable. There is no reason why we cannot dramatically reduce morbidity and mortality from sepsis, just with the simple interventions and raising awareness", said de Souza. She noted that it is not unusual for parents in Brazil to make two or three trips to the hospital before they are finally able to have their child diagnosed with sepsis.

"Again, we have to talk [about] education", said de Souza. "Sepsis is more prevalent in poorer regions, where the journey of a parent with a sick child can be very challenging. I am dedicated to educating health-care professionals about sepsis and raising awareness among the general public and health policy makers." It is an urgent task. de Souza pointed out that mortality rates for paediatric sepsis in Brazil have not budged in the past 20 years. "We still lose 20% of patients", she said. "Plus a lot of children die without receiving any medical care."

The children who do not make it to hospital are almost invariably from low-income groups. "This is an issue of equity", said de Souza. She stressed that substantial

progress can be achieved in sepsis simply by making socioeconomic and educational improvements. "Brazil is a country of continental dimensions with significant social and economic inequalities", added de Souza. "On the one hand, you have rich hospitals, where the care is excellent and there is no shortage of treatment options. Then there are the parts of Brazil where there is very little. People die needlessly and have bad outcomes from diseases which are preventable and treatable." She worries about declining rates of immunisation and politicians who have undermined support for vaccines.

The SPREAD-PED study, which was led by de Souza, mapped the epidemiological profile of sepsis in Brazilian paediatric intensive care units. The study highlighted the impact of sepsis in Brazil, revealing an incidence of paediatric sepsis three times higher than that reported in the literature. It found that incomplete vaccination status was associated with an increased risk of death in children with sepsis admitted to the intensive care unit. de Souza is currently involved in a similar project for Latin America, Spain, and Portugal, an effort that she hopes will serve as a basis for advocating for National Sepsis Action Plans in Brazil and across Latin America.

de Souza underscored the value of collaborations, both with other nations in the Americas to help address issues that sprawl across borders and with high-income countries that can support research and provide expertise. "Sepsis is a global issue, and it can only be solved by global cooperation", said de Souza.

Nonetheless, carving out time for research in a setting with so many competing priorities is not always straightforward. "You have to try to do everything at once", said de Souza. "I am a medical assistant, I work with residents and fellows, and then I have to do my research. We do not have protected time for research or additional funding and are not always encouraged [to do research]. Of course, it is still possible to do good research in Brazil, but you have to be determined and you have to be organised." Having a strong personal network is a tremendous advantage. "Balancing my roles as a doctor, wife, and mother, I strive to represent the contemporary female intensivist", said de Souza. "And I have the support of my husband and a team of colleagues who share the same ideas as me."

Talha Burki