

Anna Banerji—champion for Canada's Indigenous peoples



For the study on new admissions in the first six months of life see Int J Circumpolar Health 2001; 60: 375-79

For the **study on risk factors** see Pediatr Infect Dis J 2009; **28:** 697–701

For the **study on cost of RSV infection** see *Pediatr Infect Dis J* 2009; **28**: 702–06

For Canada's NACI statement on RSV prevention in infants see https://www.canada.ca/en/ public-health/services/ publications/vaccinesimmunization/nationaladvisory-committeeimmunization-summarystatement-preventionrespiratory-syncytial-virusdisease-infants.html Anna Banerji's family migrated to Toronto, Canada, when she was a baby, to escape India's inequality and in hope of a better life. As the only girl in the family, she felt invisible. Having earlier thought she would be a writer or teacher, a visit to India with her family changed everything. "We were crossing a bridge in Kolkata and I saw a man lying in the gutter covered in blood, his death was being ignored by the hundreds of people passing by", Banerji tells *The Lancet Infectious Diseases*. "I said then and there to my mother: I want to be a doctor, to work with people who are invisible. This man changed my life forever."

So she studied hard for the grades required to study medicine at the University of Toronto. This included time in Zambia and Kenya, where she received a harsh introduction to a range of infectious diseases and other diseases of poverty resulting in the death of women and children. She also learned to deliver babies after "stepping in to help while a midwife was on a break". She decided to become an expert in paediatric infectious diseases. Something unusual would also help her in this quest, a summer job as a clown where she learned to make balloon animals! "Providing a child with a balloon animal is a great way to distract them in treatment situations", she explains. "I later became known as Dr Balloon!"

Her training would take her to Ottawa, McGill University in Montreal, Harvard School of Public Health, USA, and also Peru, learning about tropical infections. But her true calling to help Indigenous Canadians in the country's far North came after she was asked to help on a project there, based in Igaluit, capital of Nunavut Territory. She saw less of the diseases affecting southern Canada, but her early work established that Northern Canada's Inuit babies were being admitted to hospital for respiratory infections at 20 to 40 times the rate of those of non-Indigenous children in Canada's south. And Inuit babies had a 50% chance of being admitted to hospital with a lower respiratory tract infection in their first six months of life. Banerji was asked to investigate further the risk factors for these infections, finding being of Inuit ethnicity, living outside of large towns, having a mother that smoked, less breastfeeding, and being adopted all increased the risk of admission. "I found that the that most common virus at the time was respiratory syncytial virus (RSV). When I calculated the costs of RSV infection, including evacuating babies by air and prolonged hospital and ICU stays far from Nunavut for hospital treatment, the sums were enormous", she explains. She also worked out that providing the RSV antibody vaccine palivizumab, despite its expense, could massively cut admissions and would result in a cost saving - initially an idea supported by the Canadian Paediatric Society. "Premature babies in Canada's south, at far lower risk, were routinely receiving this antibody, yet Inuit babies who had many times the risk and severity were not." Banerji met some resistance against surveillance from the then Health Department of the Nunavut Government but her campaigns eventually were successful when, in 2023, a new, cheaper RSV antibody, nirsevimab, was licenced in Canada. Banerji had been lobbying for all Indigenous babies in remote communities to be recognised as at elevated risk for RSV admission, and finally the national guidelines reflected this. Since late 2024, nirsevimab is provided routinely to all the Northern territories and provinces. Anecdotal reports from Northern Ontario, which implemented nirsevimab, have revealed a sharp decline in hospitalisations for RSV among Indigenous babies, and Banerji is expecting data from across the Arctic to show a similar drop. "The sad thing is that if this was an issue affecting white babies in Southern Canada, it would have been sorted out in a week rather than 15 years", she explains.

Overshadowing all of Banerji's experiences with Indigenous Canadians is a deeply personal and tragic story. After a discussion with an Inuit elder, she decided she would be willing to adopt an Inuit child in need. In January 2005, she had this opportunity when a baby in foster care needed a home. Raising her new son Nathan in Toronto, Banerji would take him back to the Arctic as much as possible so he could interact with his biological family and foster families. Nathan had his struggles, similar to many children from the North, but the tragic death of his biological brother due to suicide sent him on a downward spiral. He suffered from severe depression, anxiety, hallucinations, and a family history of schizophrenia. Despite pleading with Canada's largest mental health hospital that Nathan needed to be admitted or put on medication, Banerji's concerns were dismissed. The mental health experts did not recognise his inter-generational trauma. Tragically, Nathan took his own life in 2018 at age 14, as his brother had done. Many people might step back from the public eye after such tragedy. But Banerji has instead redoubled her efforts to improve healthcare in these communities, including a scholarship in Nathan's memory for Indigenous medical students. She is working, with Inuit elders and other experts on a documentary and a book that will share all her experiences with Northern Canadian health including Nathan's story.

Outside of work, Banerji has travelled most of the world, including parts of Africa unknown to many. She dreams of one day travelling to the other pole, Antarctica, and loves swimming, kayaking and canoeing—anything that takes her into nature.

Tony Kirby