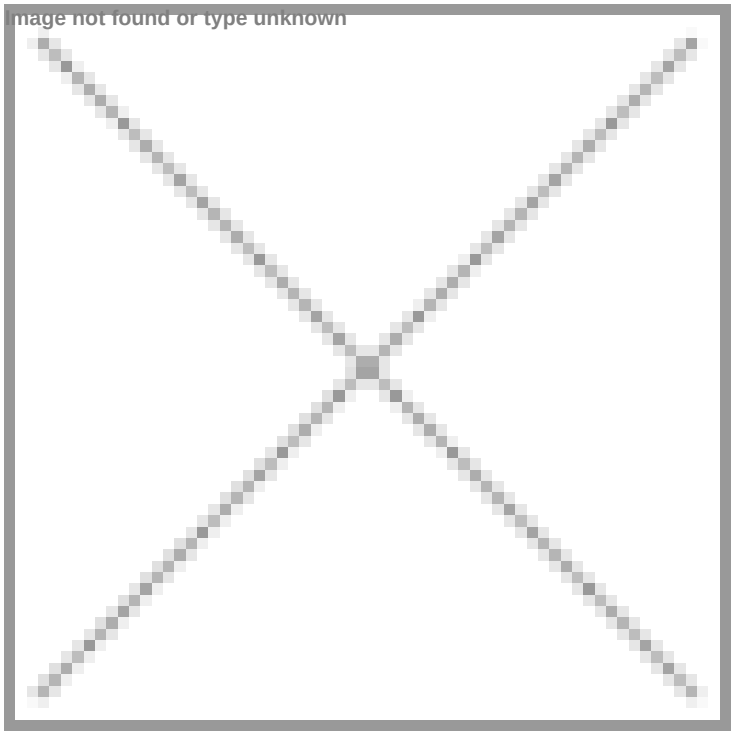
BioSpectrum the business of Bio & Health Sciences ASIA EDITION

Singapore forges into international efforts to shape a global roadmap to combat anaemia

11 September 2025 | News

Duke-NUS study highlights challenges and country-specific strategies for reducing anaemia



Singapore's Duke-NUS Medical School, in collaboration with an international team of experts, has contributed to a groundbreaking evidence-based plan to combat anaemia, a condition affecting nearly two billion people globally. The study highlights the urgent need for better data, smarter treatment strategies, and more achievable targets to address this persistent health challenge, which undermines maternal health, child survival, and economic growth.

Anaemia occurs when the body lacks enough healthy red blood cells to transport oxygen. While iron deficiency is the leading cause, other factors such as nutrient shortages, chronic diseases, and infections like malaria and hookworm vary by region. Despite its widespread impact, anaemia often receives less attention than other health threats, even though it remains a significant obstacle to global health goals.

In 2015, the United Nations set a target to halve anaemia in women of childbearing age by 2030. However, nearly a decade later, most countries remain far from achieving this goal. The study reveals that in many low- and middle-income countries, recommended interventions are either unavailable, too costly, or underutilized, underscoring the need for more effective and accessible solutions.

The team estimated how much progress each country could realistically achieve by 2030 using currently recommended

measures such as staple food fortification, iron supplementation, and preventive malaria treatment in pregnancy. They used country-specific data, including anaemia prevalence, health system capacity and how much each country can cost-effectively afford to spend on public health. Their analysis shows the global Sustainable Development Goal (SDG) target of 50 percent reduction is not feasible with current tools and funding.

The study reveals sharp contrast between countries. Singapore, for example, could achieve a 25 per cent reduction among women of reproductive age—slightly above the global average but still only half of the SDG target. With an anaemia prevalence of 18.4 per cent among women of reproductive age, Singapore's strong health system, high antenatal care coverage and ability to implement fortification programmes put it in a strong position to make meaningful gains.

By contrast, Indonesia is projected to achieve only a 9 per cent reduction due to constrained healthcare spending, while Malaysia could reach 28 per cent reduction. These variations underscore the need for country-specific goals rather than uniform global targets, ensuring public health resources are directed where they can make the most difference.

"The researchers are now sharing their findings with the World Health Organisation, with the hope that future health and nutrition targets will adopt a similar country-specific, evidence-based approach. With stronger data, better funding strategies and smarter policies, countries can make meaningful progress in reducing anaemia and improving public health.