Nigeria rolls out novel meningitis vaccine

History was made in March, 2024, when Nigeria became the first country to introduce the Men5CV multivalent meningitis vaccine,[1] an advance that will protect its population against the meningococcal disease that is prevalent in the core northern regions of the country.[1]

The decision to roll out the Men5CV multivalent vaccine is in line with Nigeria's commitment to prioritising public health and mitigating the devastating consequences of meningitis outbreaks, especially in the wake of a 50% increase in cases reported across Africa between 2022 and 2023.[1] As one of the 26 hyperendemic countries within the African meningitis belt, Nigeria has been acutely aware of the grave threat posed by meningitis, with recent outbreaks claiming numerous lives and causing widespread suffering.[2]

The Minister of Health and Social Welfare, Prof Muhammad Ali Pate, has lauded the vaccine as a new tool for health-care workers to stop the disease outbreak and put the country on a path to eliminating meningitis.[1] The vaccine is a result of multilaterally financed and coordinated work that took 13 years to complete; it provides protection against the five major strains of the meningococcal bacteria (A, C, W, Y, and X) following one single injection.[1,2]

The vaccine launch is projected to fast-track the WHO goal to eliminate meningitis by 2030.[1] As stated by Dr Tedros Adhanom Ghebreyesus, the WHO Director-General, 1 million Men5CV vaccines are expected to be rolled out in Nigeria in the coming months and years[1] as the Nigerian Government renews concerted efforts to consolidate the health-care sector and improve the collective wellbeing of Nigerian citizens. Through the support of Gavi, the Vaccine Alliance, Nigeria has embarked on a comprehensive vaccination campaign targeting people aged 1–29 years, a core, productive demographic group that is vulnerable to the disease.[1]

The vaccine launch is an important milestone in global public health. By embracing the Men5CV vaccine, Nigeria has not only shown leadership in disease prevention but has also set a precedent for other nations grappling with the health-care burden of meningitis. Nigeria's initiative will offer hope and resilience to communities across Africa and the world at large that are affected by the threat and fatality of meningitis.

In light of these profound developments, we urge other African nations to emulate the feat of Nigeria and initiate similar projects as we improve the health of the continent as a whole, one step at a time.

We declare no competing interests.

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Time to fast-track interventions to road traffic crises in Iran

Iran, one of the most populous countries in the Middle East, with more than 80 million people, grapples with road traffic injuries that have become the second leading cause of disability and the third leading cause of death in the country, excluding COVID-19.[1,2] Despite upstream national policies aiming for an annual reduction of road deaths by 10%, there was a disconcerting 15% increase in fatalities in 2022, compared with 2019.[3] This alarming change is exacerbated by a 27% rise[4] in crash fatalities involving motorcycles, mostly driven by high car prices and urban traffic congestion. The economic cost of road traffic crashes in 2022 reached unprecedented levels, constituting about 6% of Iran's gross domestic product (GDP),[5] nearly equalling the share of health sector costs from GDP between 2000 and 2023. This cost poses a severe threat to key sectors, such as health care and insurance. Immediate attention is imperative to curb the escalating human and financial costs associated with road traffic crashes in Iran.

Compounding these challenges is the demographical structure, where a substantial portion of the population is younger than 30 years. This demographical composition accentuates the urgency of addressing road safety and underscores the potential for effective policies targeting the younger demographic to yield long-term benefits. An examination of historical efforts reveals that existing measures have fallen short of curbing the rising tide of road traffic incidents in the country (as per the Road, Housing & Urban Development Research Center). The policies outlined in the first Decade of Action and National Action Plan have not produced the desired outcomes,[6] with numbers of road traffic injuries continuing to paint a grim picture.[1] Challenges faced by the automotive industry, which contributes 3·5% to Iran's GDP, are multifaceted. Economic sanctions, governmental dependence, potential for corruption, and neglect of safety research in car production contribute to a mismatch between pricing and import policies. A transparent and accountable approach is absent, hindering the production of quality cars and undermining the effectiveness of existing safety measures.[7] The two less elaborated challenges in the history of Iranian road safety are the absence of an evidence-informed policy-making framework, and the undermined role

For more on the **Road, Housing & Urban Development Research Center** see https://www.bhrc.ac.ir/ir

of the health sector in road safety promotion largely ignoring this sector's capacity in areas other than post-crash emergency care services. Even the post-crash health-care services have not been comprehensive enough to systematically address some post-discharge consequences of road traffic injuries, such as post-traumatic stress disorder and disabilities.[8]

Looking towards the future, as the second Decade of Action for Road Safety (2021–30) unfolds, a crucial opportunity emerges to redirect efforts and institute transformative change. Placing road safety at the forefront of the political agenda is paramount. Establishing an effective lead agency with a robust management system, inter-organisational coordination, and political support should take precedence.[9] Simultaneously, improving the quality of domestic vehicles becomes imperative for long-term success. Furthermore, the infrastructural challenges in Iran demand targeted policy responses. As urban centres expand and transportation networks evolve, investments in modernising and enhancing road infrastructure become essential. Implementing smart traffic management systems, improving road design, and enhancing the enforcement of traffic regulations are key components of a holistic policy framework. Additionally, fostering public–private partnerships for innovative solutions and technologies can contribute to resilience and adaptation of the road safety ecosystem.

Overall, the intersection of a young population, rapid urbanisation, and evolving transportation needs necessitates a nuanced and comprehensive approach to road safety in Iran. Policies must not only address immediate concerns, but also anticipate and adapt to the changing dynamics of the country's demographical landscape. Interventions focusing on education, awareness, and enforcement become crucial components in fostering a culture of responsible road use among the younger segments of the population.

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Defensive scholarship: learning from academia's plagiarism crisis

My colleagues and I recently argued that citation errors are not a victimless crime.[1] Such errors can deeply mischaracterise individual scientific works, inappropriately slant clinical guidelines, and even, in the striking phrase of Steven Greenberg, enable "the conversion of hypothesis into fact through citation alone".[2]

Plagiarism, a form of miscitation, has recently become a matter of recurrent public drama among some high-profile scholars,[3] ending careers and straining public perceptions of research credibility. Whether the increased scrutiny is good or bad, and the motives are earnest or something else, two points are clear. First, miscitation, even decades old, is becoming a new battleground upon which academic careers might end in disgrace. Second, spotlighting plagiarism has provoked intensified public interest in searching for further miscitation. Public trust in medicine is only complicated further by the current free-for-all landscape of artificial intelligence in research, which has become infamous for plagiarism, so-called hallucinations, and some recent astonishing and high-profile retractions.[4]

Just as it is sometimes necessary to practise defensive medicine in a highly litigious health-care climate, we must likewise learn to practise defensive scholarship in an era where citizen science is increasingly putting miscitation on trial. For better or worse—in the long run, probably for the better—we are now writing for more than one audience. We should cite sources with the intention of satisfying the test of time, the trial of peer-review, and the court of public opinion. We should further strive to instil this respect for citation accuracy in the next generation of young investigators. Citation errors are not a victimless crime. We already know they can harm