

# Vaccine Hesitancy — Threat to global immunization gains

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## INTRODUCTION

Vaccination stands among the most significant achievements of modern medicine, credited with saving millions of lives by preventing infectious disease. However, in recent years, the full potential of vaccines has been undermined by a phenomenon known as vaccine hesitancy. In 2019, vaccine hesitancy was recognized by the World Health Organization (WHO) as one of the top ten threats to global health. The WHO's Strategic Advisory Group of Experts (SAGE) defines "vaccine hesitancy" as a delay in acceptance or refusal of vaccination despite availability of vaccination services.<sup>1</sup>

The determinants of vaccine hesitancy have been extensively studied and can broadly be organized into three interacting domains; confidence, complacency, and convenience. In addition to these classic 3C components, research on vaccine hesitancy identifies contextual factors such as age, gender, education level, and socioeconomic status, as well as disease-specific perceptions including fear of infection and perceived severity of disease. Beyond structural barriers, psychological and sociocultural dynamics play a central role in shaping vaccine attitudes. Mistrust in authorities, fuelled by historical marginalization, political polarization, or past unethical medical practices, may contribute to reluctance or refusal.<sup>2</sup> Importantly, misinformation, particularly through social media platforms, has amplified uncertainty and fear around vaccination. Addressing these psychological and informational drivers is critical to understanding and mitigating hesitancy.<sup>3</sup>

Tackling vaccine hesitancy requires evidence-based, and culturally sensitive strategies. Multi-level approaches, involving individuals, communities, and institutions are most effective. National immunization programs should integrate hesitancy mitigation into broader immunization strategies.<sup>4</sup>

Vaccine hesitancy embodies a complex intersection of social, psychological, cultural, and structural factors. It challenges the fundamental aspiration of immunization programs to protect all individuals from preventable diseases. Addressing this challenge demands a multifaceted, evidence-based, and context-specific response that builds trust, enhances access, and empowers communities with accurate information. Strengthening public confidence in vaccination is not merely a scientific imperative but a societal one, vital to safeguarding global health, achieving equitable

disease prevention, and ensuring resilient health systems for future generations.

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