

Perspective

Between Hype and Health: Ethical Reflection on the HPV Campaign in Pakistan

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Abstract

The Human Papillomavirus (HPV) vaccine represents a major advancement in global public health and a moral imperative to reduce preventable suffering. In Pakistan, the recent launch of a nationwide HPV vaccination campaign marks an important milestone in cervical cancer prevention but also raises complex ethical challenges. This paper examines the ethical dimensions of Pakistan's campaign, highlighting issues of transparency, informed consent, gender equity, and the neglect of cervical screening. It argues that framing the vaccine solely as an “anti-cancer” intervention and restricting its administration to girls risks reinforcing gendered and cultural inequities while eroding public trust. The authors contend that ethically grounded public health policy requires transparency, cultural humility, equitable access, and meaningful inclusion of stakeholders in decision-making. Vaccination, while medically essential, must therefore be implemented within a framework of justice and respect to ensure that the pursuit of the greater good does not compromise ethical integrity.

Keywords: HPV vaccine, Cervical cancer, Vaccination, Public Health Ethics, Gender equity, Ethical challenges, vaccine hesitancy

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How to cite: Ishtiaq A, Saleem S. Between Hype and Health: Ethical Reflection on the HPV Campaign in Pakistan. Ann King Edw Med Univ.2025;31(3):249-252

Introduction

Vaccinations are one of the most successful public health interventions to date. Vaccinations prevent millions of deaths yearly and significantly reduce the global burden of infectious diseases. Not only do the vaccinations act as an effective preventive measure, but they also have a moral element of preventing harm and suffering among large communities. Yet, vaccine hesitancy and refusal remain a global issue. We, as clinician

ethicists, are ardent supporters of vaccinations as both a medical and ethical imperative in promoting global health equity. However, we believe that compromising ethical standards and socio-cultural sensitivity can negatively impact health inequities in regions like Pakistan, where socio-political instability and distrust in healthcare facilities are already major contributing factors.

Cervical cancer stands out as a major global concern caused by a vaccine-preventable Human Papillomavirus (HPV) infection, with an estimated 660,000 new cases and 350,000 deaths in 2022, the majority of which were caused by the HPV.¹ The World Health Organization (WHO) has identified HPV vaccination as a cornerstone of its global strategy to eliminate cervical cancer by 2030, aiming for 90% of



Production and Hosting by KEMU

<https://doi.org/10.21649/akemu.v31i3.6276>
2079-7192/© 2025 The Author(s). Published by Annals of KEMU on behalf of King Edward Medical University Lahore, Pakistan.
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girls to be fully vaccinated by the age of 15.² Multiple WHO-prequalified vaccines, including the bivalent Chinese vaccine Cecolin, approved for single-dose use, have shown long-lasting protection against high-risk HPV types 16 and 18.¹ While the Global North continues to vaccinate both boys and girls for HPV, most countries in the Global South, as per WHO guidance, are focusing on vaccinating young girls. In September 2025, Pakistan launched its first national HPV vaccination campaign, targeting approximately 13 million school-aged girls (ages 9–14) as part of this global effort to eliminate cervical cancer.² While this initiative marks a critical step toward reducing the country's cancer burden, where cervical cancer ranks among the top three cancers in women, it also exposes persistent structural and social challenges. Public hesitation, fueled by misinformation, gendered perceptions, and religious concerns about modesty and morality, continues to hinder vaccine uptake.³ The authors argue that while vaccines such as the HPV vaccine must be endorsed and widely administered, ignoring ethical concerns related to equity, cultural sensitivity, and informed consent risks undermining public trust and exacerbating existing disparities in healthcare access. A just and sustainable vaccination strategy for Pakistan must therefore integrate cultural humility and community engagement alongside biomedical efficacy.

Ethical Concerns Regarding the HPV vaccine campaign in Pakistan

1. Significance of Cervical Cancer Screening

Screening for cervical cancer is crucial as it leads to the early detection of cell changes before they turn cancerous, allowing timely treatment and a good prognosis.⁴ While the HPV vaccine is a significant tool in public health, the significance of cervical cancer screening tools cannot be undermined. Even a potentially successful campaign should not overshadow the undisputed importance of timely screening.³ Rather, an integrated prevention and screening plan should be introduced, especially when the aim is to reduce morbidity and mortality associated with cervical cancer. The recent campaign lacks the much-needed emphasis on the systematic screening protocols that include Pap smears or HPV DNA testing. These risks create a false sense of security with the HPV vaccine. Given that no vaccine offers absolute protection, neglecting early detection mechanisms may lead to missed opportunities for

timely diagnosis and treatment of pre-cancerous lesions, particularly among women who have already been exposed to HPV or remain unvaccinated. This challenge may be perpetuated by the misleading framing of the campaign that aims to “eliminate cervical cancer by 2030.”⁵

2. The Framing of HPV vaccine: anti-cancer or anti-HPV?

The HPV vaccine is being introduced through social and mass media campaigns as an “anti-cancer” rather than an “anti-HPV” vaccine. This strategy has remained partially effective in reducing moral resistance among a conservative, faith-based society. However, this raises legitimate ethical concerns about the transparency of the vaccine campaign and informed consent. A well-informed decision requires the recipients and parents/guardians to receive complete and accurate information about the purpose of the vaccine in terms of what it does and does not prevent. Downplaying the link between the HPV vaccine and a sexually transmitted disease and emphasizing cancer prevention in public health communications poses a significant risk to undermining trust and integrity of consent. The practice of ethical standards cannot be ignored in order to make public health measures palatable to a conservative society. Instead, the public health professionals, policymakers, and the state should plan to effectively and respectfully address the public sentiments. Trust is crucial in public health ethics and particularly when the country has a history of distrust caused by the state through misinformation, political manipulation of public health initiatives, and coercive measures. The state bears the enhanced moral obligation to engage the stakeholders with respect and transparency in Pakistan.

3. Gender equity and the moral responsibility of protection

The restriction of the HPV vaccine to girls alone introduces serious questions of justice and gender equity. As an anti-HPV vaccine, its protection extends beyond cervical cancer to other malignancies linked to the virus. The disease spectrum includes cervical cancer, Head and Neck Squamous Cell Carcinomas (HNSCCs) (including those of the oral cavity and oropharynx), and malignancies of the vagina, vulva, anus, and penis.⁴ Limiting vaccination to girls implicitly assigns the moral and biomedical responsibility for disease prevention to women, while

men, who equally acquire and transmit HPV, remain outside the preventive framework. This not only perpetuates gendered inequities but also fails to achieve optimal herd immunity. The metaphysical harm of such exclusion lies in reinforcing the notion that women must bear the burden of sexual and reproductive health risks, even in contexts where infection originates in shared behavior. Metaphysical harm refers to the harm done to one's moral or social identity when institutions reinforce unjust power dynamics.⁵ Here, limiting vaccination to girls sends a subtle but harmful message: that girls' bodies are both the *site* and *solution* of moral risk. In a society where healthcare-seeking behaviors differ significantly by gender, an inequitable vaccine policy does not address both biological and social determinants of health.

4. Informed consent and Assent

An additional ethical concern relates to the near-complete absence of discourse on the assent of children aged 9–14 years, the primary target population for the HPV vaccine. While these minors may lack legal decision-making capacity, ethical standards in pediatric care emphasize the importance of involving them in decisions affecting their health to the extent that their maturity allows.⁶ Respecting a child's developing autonomy not only fosters trust in healthcare interactions but also contributes to the cultivation of responsible, autonomous adults.^{7,8} Ignoring the need for meaningful engagement with young recipients risks reducing them to passive subjects of biomedical intervention rather than partners in their own health. Informed parental consent, though necessary, is ethically incomplete without seeking and respecting the child's assent. It is important to clarify that we are not entering the debate over whether teenagers should have the right to consent to vaccination, either to accept or decline it, as that is beyond the scope of this discussion. Our focus is solely on emphasizing the importance of obtaining the child's assent for vaccination.

The Way Forward

The path toward effective and sustainable HPV vaccination in Pakistan depends not only on scientific progress but also on ethical decision-making. Public health policies cannot be justified simply by invoking the “greater good” without carefully examining what that good involves, who benefits, and what moral costs are incurred. When

goals are misjudged or ethical considerations are ignored, the methods risk becoming coercive or exclusionary. Vaccination efforts that overlook these factors may achieve high coverage numbers but fail to build the trust, understanding, and cultural relevance needed for long-term success. Additionally, the language and terms used in the campaign, such as “elimination by 2030,” can create unrealistic expectations and suppress nuanced discussions about access, consent, and context. This type of framing in public health can lead to the marginalization of individual autonomy in the pursuit of collective goals. Central to an ethically defensible strategy is transparency, both in public communication and institutional intent.⁹ The politicization of health initiatives erodes public confidence, whereas openness about risks, benefits, and limitations reinforces legitimacy. Equally vital is the promotion of informed decision-making, which extends beyond procedural consent to encompass honest dialogue with parents, guardians, and adolescents. Such engagement must respect varying levels of literacy, belief systems, and moral reasoning across communities. Public health initiatives must be rooted in a commitment to justice and equitable access.¹⁰ Meanwhile the HPV vaccine campaign in Pakistan has highlighted the issues of epistemic and distributive injustice. A state's agency is compromised when national priorities are designed by the priorities of international donors. The disparity in healthcare standards between the Global North and Global South exposes the double standards of global policy-makers, an inequity often mirrored by national governments in their own implementation strategies. The promise of vaccines as global public goods remains incomplete if access continues to favor the developed world or urban elites within low- and middle-income countries. Achieving equity requires targeted outreach to marginalized populations, gender-balanced policies, and the removal of financial, geographic, and social barriers to immunization. Sustainable progress depends on cultural humility and inclusive governance and policies. The design and execution of vaccination programs must involve all relevant stakeholders, from healthcare professionals, ethicists, and educators to religious leaders, parents, and the adolescents themselves. Only through such inclusive deliberation can public health interventions transcend biomedical logic and reflect the moral

realities of the societies they aim to serve. Ethical reflection, then, is not an obstacle to progress but its precondition. It is through ethically grounded decision-making that Pakistan can transform its HPV vaccination program into a model of justice, trust, and cultural integrity.

Conclusion

The ethical success of Pakistan's HPV vaccination campaign will not be measured solely by coverage rates but by the integrity of the processes that underpin it. Vaccines save lives and represent one of humanity's greatest scientific achievements, yet their implementation must honor the values of justice, honesty, and respect for persons. To disregard ethical complexity in pursuit of expedience risks procreating the very inequities public health seeks to overcome. The imperative, therefore, is clear. Pakistan must advance its vaccination goals through a framework that is transparent, equitable, and culturally grounded, one that protects not only against disease but also against the erosion of trust that arises when ethical reflection is dismissed.

Acknowledgments

The authors used ChatGPT (OpenAI, 2025) to assist with minor language editing, rephrasing, shortening the length of the initial draft, and generating an abstract from the written draft. AI was not used for literature search, review, interpretation, or generation of ideas. Authors have reviewed all content to ensure accuracy and integrity.

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