

Saving Lives and Protecting Futures Through an Urgent Tackling of Cervical Cancer in Pakistan

Salma Memon,^{1,2} Munawar Hussain Soomro^{*1,2}

¹Department of Pediatrics, Cumming School of Medicine, University of Calgary, Calgary, Canada

²Owerko Centre, Alberta Children's Hospital Research Institute, University of Calgary, Calgary, Canada

Cervical cancer is one of the most preventable forms of cancer, yet it remains a major public health problem in many low-and middle-income countries, including Pakistan. According to the World Health Organization (WHO), cervical cancer ranks as the fourth most common cancer among women in the world, with an estimated 660,000 new cases and over 350,000 deaths annually.¹ Countries like Pakistan continue to face rising cases of cervical cancer due to various reasons, such as; the lack of awareness, limited resources, cultural barriers, and inadequate health infrastructure. In Pakistan, cervical cancer is the third most common cancer among women and one of the leading causes of cancer-related deaths.^{2,3} It remains a significant public health concern in Pakistan, with an estimated 5,000–7,000 new cases reported annually.⁴ However, the true burden is likely to be higher due to scanty and improper cancer registries, and under reporting. Each year, thousands of women are diagnosed at advanced stages, when treatment is difficult, expensive, and most importantly less effective.

In Pakistan, health care is commonly provided by public as well as private sector; however, majority of the population (approximately 70%) seeks healthcare in the private sector, and it is estimated that around 85% of the population lack the health insurance coverage.⁵ It is unfortunate and tragic that even though the cervical cancer is a highly preventable disease, and can be detected at early stages and prevented through the human papillomavirus (HPV) vaccine.⁶ Cervical cancer develops in the cells of the cervix, the lower part of the uterus that connects to the vagina.⁷ Almost all cases are linked to persistent infection with high-risk types of HPV, a common sexually transmitted infection. Most HPV infections clear naturally, but when they persist, they can cause changes in cervical cells that may eventually lead to cancer.⁷

The disease carries a high mortality rate, with nearly 60% of diagnosed women succumbing to it, largely because most cases are detected at advanced stages.³ It predominantly affects women between the ages of 15 and 55, striking during their most productive years and imposing profound social and economic consequences on families and communities.^{3, 8} The burden is further exacerbated by healthcare inequalities especially in rural areas, where the women face limited access to

screening and treatment services, low awareness, and persistent socio-cultural barriers that delay diagnosis and care.⁸ Cervical cancer not only impacts women's health but also has ripple effects on households, as mothers and daughters are often the backbone of family care and economic contribution.

The risk factors can be the early marriage and childbearing, multiple pregnancies, lack of regular screening, limited awareness of HPV, tobacco use, poor socioeconomic conditions.⁹ The long pre-cancerous stage makes cervical cancer one of the easiest cancers to prevent and treat if detected early. However, in Pakistan, most cases are diagnosed late due to lack of screening programs and social stigma around reproductive health issues.¹⁰ There are many other barriers that make it difficult to prevent and treat cervical cancer in Pakistan. Many women, especially in rural areas, have little or no awareness about cervical cancer, its risk factors, or ways to prevent it.¹¹ Cultural taboos and misconceptions often bar the discussions openly about the reproductive health.¹² Unlike high-income countries that have routine Pap smears and HPV testing, Pakistan lacks a national screening program, while private hospital tests are too expensive for most of the women.⁸ HPV vaccination rates are also very high since the vaccine is not part of the national immunization program, and many families cannot afford it. In addition, there are not enough cancer specialists or treatment centers, forcing women to travel long distances for care, which delays diagnosis and treatment.¹³ Social stigma and fear of judgment prevent many from seeking help, and economic hardship makes the high cost of treatment nearly impossible for many families to bear. Together, these barriers contribute to late diagnosis and high death rates from

*For Correspondence

Dr. Munawar Hussain Soomro

Department of Pediatrics, University of Calgary

Owerko Centre, Child Development Centre, 2500 University Dr. NW

Calgary, Alberta, Canada, T2N 1N4

[Email:munawar.soomro@ucalgary.ca](mailto:munawar.soomro@ucalgary.ca)

Submission Date: 03-01-2026

Acceptance Date: 06-06-2026

Publication Date: 30-06-2026

This Editorial may be cited as: Memon S, Soomro MH. Saving Lives and Protecting futures through an Urgent Tackling of Cervical Cancer in Pakistan. *Adv Basic Med Sci*. 2026;10(1):01- 03. DOI: <https://doi.org/10.35845/abms.2026.1.506>

cervical cancer in Pakistan.

The HPV vaccine is one of the most powerful tools in preventing cervical cancer. It protects against the most common cancer-causing strains of the virus. The World Health Organization (WHO) recommends vaccination for girls aged 9–14, ideally before the onset of sexual activity.¹ Countries that have successfully introduced HPV vaccination have witnessed dramatic reductions in cervical cancer rates. For instance, Australia is on track to eliminate cervical cancer within the next decade due to widespread vaccination and screening.¹⁴ In Pakistan, however, HPV vaccination remains limited to a few private hospitals and clinics. Cost, lack of awareness, and misconceptions about vaccines are major barriers.⁸ Introducing HPV vaccines into the Expanded Program on Immunization (EPI) could be a game-changer in reducing cervical cancer burden. Screening saves lives, Pap smears and HPV testing can detect precancerous changes in the cervix, allowing for early treatment before cancer develops. In many countries, routine screening has reduced the cervical cancer rates up to 50%.¹⁵

In Pakistan, however, only a very small percentage of women undergo cervical cancer screening, due to the lack of awareness about screening tests, limited availability outside major cities, fear and stigma around pelvic examinations or the inadequate training of healthcare providers.^{2, 3, 8} Therefore, it is utmost important to establish affordable, accessible, and culturally sensitive screening programs, especially in rural and underserved areas. Considering socio-cultural dimensions, health is never just a medical science, it is a social dimension as well. In Pakistan, cultural beliefs, gender inequality, and limited autonomy for women restrict access to healthcare. On the other hand, this is also true that, most often women are dependent on their husbands or in-laws for permission to seek medical care.¹⁶ Stigma around gynecological health means women delay seeking treatment until symptoms are severe. Therefore, to address the cervical cancer it requires not only medical solutions but also cultural change, where reproductive health becomes an open and acceptable topic for discussion. Schools, media, and religious leaders can play a vital role in breaking the silence and encouraging preventive health behavior.

Pakistan lacks a national cancer control policy focused on prevention.¹⁷ Unlike breast cancer, which has gained public attention in recent years, cervical cancer remains under-prioritized. Key policy gaps are HPV vaccine not included in national immunization schedule, no nationwide screening program, weak cancer registries and poor data collection, limited public awareness campaigns.³ Without urgent action, the burden of cervical cancer will continue to rise, putting thousands of women's lives at risk.

To protect women and future generations from cervical cancer,

Pakistan needs a strong and united approach. The first step is to introduce the HPV vaccine into the national immunization program, making it affordable and accessible to all, while educating parents and communities to encourage acceptance. Nationwide screening programs using Pap smears and HPV tests should be established across public health facilities, with trained healthcare providers and mobile health units reaching even the most remote areas. Raising awareness through mass media campaigns, school education, and community engagement, including religious and local leaders can help break the taboos around reproductive health. Strengthening healthcare infrastructure is also vital by expanding cancer care centers, training more gynecological oncologists, and offering financial support to low-income families. Social and cultural barriers must be addressed by empowering women to make informed health decisions and promoting open family discussions about prevention and care. Finally, improving research and cancer data collection will allow Pakistan to design targeted, evidence-based strategies for prevention, early detection, and treatment, ensuring a healthier future for mothers and daughters alike.

In conclusion, the cervical cancer is not just a health issue, it is a matter of social justice, women's rights, and family well-being. Every death from cervical cancer in Pakistan is a tragedy because it is largely preventable. Protecting mothers and daughters requires urgent collective action from the government, healthcare providers, civil society, and communities. By making HPV vaccination accessible, ensuring nationwide screening, breaking cultural taboos, and strengthening healthcare infrastructure, Pakistan can drastically reduce cervical cancer burden. The fight against cervical cancer is not just about saving lives, it is also about the protection of dignity, future, and well-being of women and girls who are the foundation of families and the society at large. If we act now, we can build a future where our mothers and daughters remain safe from this preventable disease, where silence and stigma are replaced by awareness and empowerment, and where Pakistan joins the global movement toward the elimination of cervical cancer.

REFERENCES

1. World Health Organization. Cervical cancer: Key facts. Geneva: World Health Organization. 2024 Apr 24.
2. Shahnaz S, Fricovsky E, Anwar R, Arain MI. Cervical Cancer Awareness and Attitude Towards Cervical Cancer Screening and Human Papillomavirus Vaccines Among Urban Women of Karachi, Pakistan. *Cureus*. 2023 Aug 4;15(8):e42970.
3. Batool SA, Sajjad S, Malik H. Cervical cancer in Pakistan: A review. *J Pak Med Assoc*. 2017 Jul 1;67(7):1074-7.

4. Cohen PA, Jhingran A, Oaknin A, Denny L. Cervical cancer. *The Lancet*. 2019 Jan 12;393(10167):169-82.
5. Kruk ME, Gage AD, Arsenault C, Jordan K, Leslie HH, Roder-DeWan S, Adeyi O, Barker P, Daelmans B, Doubova SV, English M. High-quality health systems in the Sustainable Development Goals era: time for a revolution. *The Lancet global health*. 2018 Nov 1;6(11):e1196-252.
6. Chidebe RC, Osayi A, Torode JS. The Global Fund, Cervical Cancer, and HPV infections: what can low-and middle-income countries do to accelerate progress by 2030?. *EClinicalMedicine*. 2025 Mar 1;81.
7. Fowler JR, Maani EV, Dunton CJ, Gasalberti DP, Jack BW. Cervical Cancer. *StatPearls*, Treasure Island (FL).
8. Qamar J, Maheen M, Mohammad JG. Insufficient resources for cervical cancer in Pakistan: a significant burden on public health. *Annals of Medicine and Surgery*. 2025 Mar 1;87(3):1114-6.
9. Ray A. Human papillomavirus and other relevant issues in cervical cancer pathogenesis. *International Journal of Molecular Sciences*. 2025 Jun 10;26(12):5549.
10. Chughtai N, Perveen K, Gillani SR, Abbas A, Chunara R, Manji AA, Karani S, Noorali AA, Zakaria M, Shamsi U, Chishti U. National cervical cancer burden estimation through systematic review and analysis of publicly available data in Pakistan. *BMC public health*. 2023 May 5;23(1):834.
11. Hirani S, Khan S, Akram S, Virji SN, Shaikh PA, Naem E, Chaudhry RA, Khalid AB, Khan JU, Qasim MS, Jehan I. Knowledge, awareness, and practices of cervical cancer, its risk factors, screening, and prevention among women in Karachi, Pakistan. *European Journal of Cancer Prevention*. 2021 Jan 1;30(1):97-102.
12. Proff AA, Fatima S, Limón ML. Becoming women: period. Perceptions of barriers and facilitators to menstrual hygiene management programs for Pakistani girls. *Frontiers in Public Health*. 2023 Aug 11;11:1083688.
13. Rattani SA, Dahlke S, Cameron B. Cancer care in Pakistan: a descriptive case study. *Global Qualitative Nursing Research*. 2022 Jan 12;9:23333936221080988.
14. Zeitouni J, Osazuwa-Peters N, Dundar Y, Zimet G, Varvares MA. Two decades of the HPV vaccine: its promise, progress, prospects, projections, and posterity. *The Lancet Regional Health–Americas*. 2025 Nov 1;51.
15. Eun TJ, Perkins RB. Screening for cervical cancer. *The Medical clinics of North America*. 2020 Nov;104(6):1063.
16. Habib SS, Jamal WZ, Zaidi SM, Siddiqui JU, Khan HM, Creswell J, Batra S, Versfeld A. Barriers to access of healthcare services for rural women—applying gender lens on TB in a rural district of Sindh, Pakistan. *International journal of environmental research and public health*. 2021 Sep 26;18(19):10102.
17. Akhtar S, Aziz N, Baloch F, Jarrar Z, Khan S, Hanif S, Qamar S, Imran M, Khattak M, Awan S, Almas A. Non-communicable diseases prevention and control in Pakistan: recommendations from policy and public health experts. *In BMC proceedings 2025 Oct 14 (Vol. 19, No. Suppl 30, p. 32)*. London: BioMed Central.

CONFLICT OF INTEREST

Author declared no conflict of interest

GRANT SUPPORT & FINANCIAL DISCLOSURE

Author declared no specific grant for this research from any funding agency in the public, commercial or non-profit sectors

AUTHORS CONTRIBUTIONS

SM: Conception, Design of the work, Data collection, and Drafting, Reviewed, Final approval.

MHS: Conception, Design of the work, Data collection, and Drafting, Reviewed, Final approval and Submission.

DATA SHARING POLICY

The data that support the findings of this study are available from the corresponding author upon reasonable request.



This is an Open Access article distributed under the terms of the Attribution- NonCommercial 4.0 International

ABMS web address: www.abms.kmu.edu.pk

Email address: abms@kmu.edu.pk