LETTER TO THE EDITOR OPEN ACCESS

## Time for Reintroducing HPV Vaccine in Pakistan for Primary Prevention of Cervical Cancer

Sir,

Human papilloma virus (HPV) vaccination is an effective prevention against cervical cancer, the 4<sup>th</sup> leading cancer among women worldwide. Global cervical cancer elimination is a WHO 2030 target where one key strategy is reaching a global target of 90% of girls being vaccinated with HPV vaccine by 15 years of age. 1 Since the HPV vaccine approval by the FDA back in 2006, more than 80 countries have introduced the HPV vaccine. Australia is going to be the first country to achieve cervical cancer elimination by 2035 through their National Immunization Program, providing free of cost HPV vaccine to school-going boys and girls. With the introduction of three licensed and safe HPV vaccines,<sup>3</sup> HPV vaccines programs are also being implemented successfully in low-to-middle income countries like India, Bhutan, Malaysia, Indonesia, and Bangladesh where the vaccines are usually available at doctor offices, community health clinics, school-based health centres, and health departments.4

HPV vaccine was introduced 3-4 years back in Pakistan, but no data is available for its coverage and reasons for discontinuation. Unfortunately, there is no HPV vaccine currently available in most parts of Pakistan or any HPV vaccination program, making HPV a major threat to 68.6 million women at risk. In a prediction model study, up to 133,000 cervical cancer cases would be prevented over the next decade with 90% annual HPV immunisation coverage among girls. Pakistan needs to reintroduce HPV vaccine preferably at a national level, utilising routine effective and established immunisation delivery strategies.

The government of Sindh, Pakistan has announced that they will be launching HPV vaccination program for adolescent girls (school-based) in Karachi in 2022. Before the vaccine rollout, it is important to increase awareness about the use and safety of HPV vaccine while dispelling misinformation about it.

Programmatic challenges and HPV vaccine resistance due to multiple factors particularly in reaching this new target of the school age group for routine vaccination are important to address for the successful implementation of HPV vaccine in Pakistan. Therefore, it is important to assess awareness, feasibility, and acceptability of the HPV vaccination program among the general population, health workers and community-level stakeholders. Nationwide educational campaigns are needed to increase public, patient and health care professionals' awareness about HPV vaccine. At the same time, the issues of the cost

of the vaccine and sufficient HPV vaccine supplies can be addressed through working with forums such as GAVI, the vaccine alliance. The introduction of HPV vaccines will reduce the risk of cervical cancer, but implementation of screening programs at the primary health care level in Pakistan remains important secondary intervention. Despite the global disruption and competing demands from the COVID-19 pandemic, strong political will and leadership can make a national HPV vaccination program a reality in Pakistan and get it well on its way to eliminate a largely preventable cancer in women.

## **COMPETING INTEREST:**

The authors declared no competing interest.

## **AUTHORS' CONTRIBUTION:**

US: Wrote the original draft, edited, and searched literature review.

AA, ZS: Edited the letter and did critical review of the final draft. All the authors have approved the final version of the manuscript to be published.

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