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EDITORIAL

The case for integrated human papillomavirus vaccine and HIV prevention with broader sexual and reproductive health and rights services for adolescent girls and young women

Manjulaa Narasimhan[a,*], Heather Pedersen[b], Gina Ogilvie[b] and Sten H. Vermund[c]

[a]Department of Reproductive Health and Research, UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme, World Health Organization, Geneva, 1211, Switzerland; [b]University of British Columbia Faculty of Medicine and British Columbia Centre for Disease Control, Vancouver, BC, V6H 3N1, Canada; [c]Yale School of Public Health, New Haven, CT, USA

*Corresponding author: E-mail: narasimhanm@who.int

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Sustainable Development Goal (SDG) 3 is to ensure healthy lives and promote well-being for all at all ages. The UN Global Strategy for Women's Children and Adolescent Health has been developed with SDG 3 in mind. These represent a new beginning for the global development agenda in moving away from siloed, vertical approaches, and focus on comprehensive sexual and reproductive health and rights (SRHR), including HIV. Integrated, multidisciplinary responses are increasingly critical from economic, political and health systems perspectives; piecemeal approaches leave too many gaps in the elements left unaddressed. A strengthened focus on SRHR/HIV integrated healthcare service delivery can support the achievement of joint health outcomes and goes beyond a single disease to represent a more holistic perspective. Building upon global expert consultations to identify new approaches to catalyze HIV prevention in adolescent girls and young women (AGYW) in the context of comprehensive sexual and reproductive health and rights,[1,2] a consultative, expert meeting was convened (Expert meeting on STI/HIV Prevention for Adolescent girls and Young Women), co-convened by the British Columbia Centre for Disease Control (BC-CDC) and the WHO Department of Reproductive Health and Research (WHO/RHR) in conjunction with the Fourth Global Symposium on Health Systems Research (16 November 2017; Vancouver, Canada)) to examine the lessons learnt from the introduction of the human papilloma virus (HPV) vaccine to AGYW that could be leveraged for antiretroviral (ARV)-assisted HIV prevention interventions in this population.

For HIV prevention, oral pre-exposure prophylaxis (PrEP) is being implemented for women and key populations in several high HIV incidence countries through integrated programs, such as the DREAMS partnership of the U.S. President's Emergency Plan for AIDS Relief (PEPFAR).[3] Other ARV-based biomedical products include the dapivirine vaginal ring, and various multipurpose prevention technologies are innovations in various stages of development for HIV prevention for women and girls. However, despite the high efficacy of PrEP when used with fidelity, immense challenges remain for implementation to AGYW, including acceptability, access and adherence.

HPV vaccine has faced similar uptake and distribution challenges for low- and middle-income countries (LMICs). HPV vaccination for adolescent girls is becoming much more widely available through The Global Alliance for Vaccines and Immunizations (GAVI) to low-income countries at a heavily subsidized cost. However, only a handful of countries with high rates of cervical cancer have HPV vaccination programs with high coverage rates.[4] AGYW are consequently poorly served for both HIV and HPV prevention despite well-documented efficacious biomedical interventions. Other sexually transmitted infections (STIs) are also controlled with standard prevention and disease control programs based on case-finding, treatment and contact tracing.[5] Primary prevention can be nurtured with condom advocacy and distribution, self-efficacy and gender-based sensitivity training and, for young men, voluntary medical male circumcision. Existing programmes for this population are often fragmented or are insufficiently implemented as part of an essential package of services and, therefore, presents significant challenges to strategic coordination, equitable service provision and quality assurance.

The introduction of the HPV vaccine is now done in the context of cancer prevention with young girls in school-based programs; 9–13 year old girls being the main target of this two-to-three

dose vaccination initiative.[6] On the other hand, oral tenofovir/emtricitabine-based PrEP for at-risk individuals is a daily use product that needs to be accompanied with support and counseling regarding sexual and reproductive health and rights.[7] This is a daunting challenge in the absence of more attractive, motivating package of services. While it is important not to jeopardize successful programs for HPV vaccine introduction, which some may feel can happen if messages related to sexuality and sexual health are introduced to young children, the interaction with the healthcare system in the pre-adolescence provides a critical step in building trust with health care providers and to the health system. This in turn offers the possibility to enable AGYW to access services when they need to do so during adolescence or later. Healthcare services that the AGYW could then access, if they already had trust in healthcare providers and had access to age-appropriate information, could cover a range of issues to meet their sexual and reproductive health and rights.[8] This would include, for example, contraception for the prevention of unintended pregnancy and attention to STIs, including HIV, ideally within a holistic adolescent health agenda focused, too, on tobacco or alcohol use, gender-based violence prevention, and general health and well-being.[9] The experience from the HPV vaccine implementation can also serve as a model for the delivery for the STI and HIV prevention products currently in development, such as multipurpose prevention technologies that are biomedical prevention products that could potentially target multiple health issues.[10]

Sexuality and sexual behavior often triggers strong reactions from political, religious and other cultural sectors of society. Nonetheless, reaching AGYW with interventions to advance their SRHR and improve their self-efficacy requires that the public health community and healthcare professionals ensure evidence-based policies and programs are appropriately prioritized and supported. There is consensus that adolescent girls and young women require multidimensional programs and interventions, but the coordination and implementation challenges of such programs are rarely done at scale.[11]

Diversity in the models for integrated service delivery or linkages between sexual and reproductive health, HPV vaccination and HIV prevention, can protect the most marginalized AGYW from going unserved.[12] For example, school-based programs for the HPV vaccine yields the highest population-coverage and is for now the most cost-effective intervention. However, measures should also be in place to reach out-of-school and absent girls. In the introduction of HPV vaccine, there exists an opportunity to introduce a more comprehensive health agenda.[13] A principal obstacle is the reluctance of vertical vaccine program managers to permit a potentially controversial expansion of comprehensive services.

A critical caveat is the need for well-planned, adequately resourced integration of services with appropriately trained healthcare providers who are sensitive to and respectful of the needs of their patients. Inserting additional services to an overstretched health system without proper resources may compromise quality of care and further disadvantage vulnerable AGWY. Schools remain underserved for SRHR education and advocacy, and key populations of young people often neglected.[14,15] The need to develop synergies between national programs on contraception, STI disease control, HIV and immunization, and cancer control is not new, but remain challenging to put into practice.[16] However, AGYW will fail to benefit from the advances in biomedical technologies without coordination between national SRH, HIV, immunization and health education programs, and the development of more comprehensive, combination prevention policies, guidelines and programs.[17,18]

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