WHO Backs Single Dose of Hepatitis A Vaccine in Some Cases

The World Health Organization (WHO) backed a single-dose strategy for hepatitis A vaccines for children aged 12 years or older and for hepatitis A outbreaks in a new position paper.

The single-dose recommendations are more expensive than those from 2012, when the WHO advised close monitoring and evaluation following single-dose administration.

"Data on vaccine effectiveness, antibody persistence, and modelling on long-term seroprotection indicate that an off-label, single-dose schedule is equivalent to the 2-dose schedule in children, in addition to being less costly and easier to implement," according to the new recommendations. However, a 2-dose schedule is still preferred for adults aged 40 years or older due to a lack of evidence on immunogenicity and long-term protection in this age group.

The WHO also recommends single-dose vaccination during hepatitis A outbreaks, emphasizing early intervention focused on a self-contained community or a well-defined population.

According to the guidance, hepatitis A vaccination should be added to national immunization schedules if there is an increase in hepatitis A disease among older children, adolescents, or adults; if endemicity changes from high to intermediate; or if it is cost-effective. In highly endemic countries, most individuals are asymptomatically infected with hepatitis A virus in childhood, which prevents clinical hepatitis later in life. Immunization programs that do not provide enough coverage in such countries may paradoxically increase disease risk among unvaccinated persons.

Countries with improving socioeconomic conditions may rapidly move from high to intermediate endemicity, likely making large-scale hepatitis A vaccination in early childhood cost-effective, according to the guidance. In such cases, catch-up vaccinations should be considered based on age-specific seroprevalence rates.

High-risk groups also should be vaccinated, particularly in countries with low endemicity. These include travelers from low-endemic to higher-endemic countries; men who have sex with men; sewage and laboratory workers; people who inject drugs; people who are homeless or incarcerated; migrants and refugees; and patients with chronic liver disease or HIV, the WHO report stated.

Health workers are not considered high-risk and should follow general population vaccination advice, according to the WHO guidance. Hepatitis A vaccination also has largely replaced immunoglobulin as a pre-exposure or postexposure prophylaxis due to greater and longer-lasting efficacy and safety, the organization said.

Studies Find Single Dose of HPV Vaccines May Be Effective

One dose of human papillomavirus (HPV) vaccine may provide young girls protection against infection, a study found.

A 1-dose schedule could reduce costs, simplify vaccine delivery, and expand access to HPV vaccine compared with multidose schedules, which currently provide about 15% global coverage for full vaccination, the researchers wrote.

Published in The Lancet Global Health, the analysis of randomized trial data examined antibodies generated by 9- to 14-year-old girls in Tanzania 2 years after they received 1-, 2-, and 3-dose regimens of either a 2-valent or a 9-valent HPV vaccine. Their antibody levels were compared with those from adults and children who received a single dose of an intended multidose regimen in 2 historical observational studies in Costa Rica and India. Seven-year HPV-16 and HPV-18 infection rates in these historic 1-dose cohorts were comparable with multidose cohorts despite lower antibody levels, the authors wrote.

At 24 months, antibody levels for both HPV-16 and HPV-18 were higher in the single-dose cohorts for both vaccines in the current study than in their historical comparator cohorts. Both met the predetermined noninferiority criteria for the current study.

"[O]ur findings contribute to the evidence that one dose of HPV vaccine might provide strong protection against cervical cancer and be a promising strategy towards achieving cervical cancer elimination in sub-Saharan Africa and elsewhere," the authors wrote.

A second study compared immunogenicity of 1 dose of the 2-valent and 9-valent vaccines with 2- and 3-dose regimens in the Tanzanian trial. One dose of both vaccines was noninferior to 2 or 3 doses for stimulating HPV-16 antibodies, but not HPV-18 antibodies, although 98% of 1-dose recipients were seropositive for HPV-18 antibodies.

"A single dose of the 2-valent or 9-valent HPV vaccine in girls aged 9-14 years induced robust immune responses up to 24 months, suggesting that this reduced dose regimen could be suitable for prevention of HPV infection among girls in the target age group," the authors concluded.

COVID-19 Limited Access to Sexual and Reproductive Health Services

Restrictions and supply disruptions brought on by the COVID-19 pandemic reduced access to sexual and reproductive health (SRH) services around the world, according to a review published in BMJ Global Health. These services include contraception, abortion, gender-based and intimate partner violence follow-up, and sexually transmitted infection (STI) treatment and prevention.
The disruptions may have contributed to as many as 2.7 million unexpected pregnancies in the pandemic’s first year and 1.2 million unsafe abortions in the first 6 months. The findings suggest a need for policy and practice adaptations that maintain and improve sexual and reproductive health service access now and in future public health crises, the authors wrote.

Nearly one-third of the 83 studies included in the review examined documented declines in contraception, with the majority focusing on long-acting reversible methods. Substantial declines were seen in injectable and emergency contraceptives, placement and removal of long-acting devices, and tubal ligations. More than half of US clinics canceled or postponed contraceptive visits while 86% of sexual and reproductive health clinicians and stakeholders in 29 countries said patients had less or much less access because of the pandemic.

In-person abortion services were overwhelmingly curtailed while remote services, such as online consultations for mailed medical abortion pills, ticked up. Declines were prevalent in areas with restrictive abortion policies, including a 16% reduction in Ethiopia and a 38% decrease in Texas, while 35% and 21% of sexual and reproductive health clinics closed in the US South and Midwest, respectively.

Fourteen studies found service reductions for gender-based and intimate partner violence. The reductions included resource diversion for gender-based violence and sexual assault examinations to COVID-19 relief, decreased vacancies in shelters and safe-housing, curtailed advocacy and intervention, and delays in help for individuals quarantined with an abuser.

Nearly half of included studies found decreased access to STI and HIV services. STI testing reductions were reported in Jordan, Thailand, Uganda, and the US. One study found that 95% of community STI testing clinics in 53 countries in Central Asia and Europe decreased testing, while another noted significant reductions in asymptomatic STI screening in Australia and the US. HIV pre-exposure prophylaxis prescribing decreased 80% in the US, and follow-up declined among vulnerable women in South Africa.

The authors noted that few studies were conducted in areas with the greatest COVID restrictions, including East and South Asia. “Our work evidences the scarcity of SRH research in settings with high burden of disease and on marginalized groups with distinct SRH needs, underscoring a theme of widened health disparities caused by the pandemic.”

Midwifery Continuity of Care Offers Benefits, but Not Widely Adopted

Compared with other models of childbirth care, midwife-led continuity of care models have been shown to reduce rates of preterm birth and fetal loss for women at low and mixed risk in a small number of high-income countries, according to a review in *PLOS Global Public Health*. Yet they have not been adopted at a national level by any country in the world other than New Zealand.

The study examined 175 reports of midwife continuity of care practices, the majority of which were in high-income countries. Most described services designed so that the same clinicians provided care across the continuum of antenatal, intrapartum, and postnatal care. In the most common approach, small groups of midwives provide care for designated patients, known as caseload midwifery or midwifery group practice.

The continuity-of-care services were located in the patients’ usual hospitals or in adjacent or free-standing birth centers, usually in urban areas. Some midwife-led continuity-of-care services were offered through homebirth practices, either as part of the hospital system or as a private service. Services in low- to middle-income countries (LMIC) were more diverse. Some featured a lead midwife delivering care across the continuum. Others featured care delivery teams with a midwife on-call during labor who had previously seen the delivering patient for antenatal care. In some cases, a midwifery continuity of care team ran in parallel with an obstetric team.

Midwives were the most common provider of continuity of care across all settings. Services were mostly led by midwives but were usually integrated with existing services, including referral to obstetric services, when needed. About one-quarter of services were for patients and newborns at risk of adverse outcomes.

The authors concluded, “There is a need for further research on midwifery continuity of care models in LMICs, and strategies to facilitate transition to, and scale-up of, midwifery continuity of care initiatives globally.” – Howard D. Larkin

Note: Source references are available through embedded hyperlinks in the article text online.