Implementation of point-of-care infant diagnosis technologies for HIV

In this webinar we discussed point-of-care (POC) infant diagnosis technologies for HIV. We shared highlights from the consolidated guidelines published in 2021 and heard country experiences, looking at the benefits, implementation processes, and challenges of POC infant diagnosis. We also explored the role of diagnosis at the end of breastfeeding, and case-finding strategies.

Dr Lara Vojnov provided an overview of the evolution of antiretroviral therapy (ART) coverage in pregnant women as well as infant HIV infection and diagnosis in the last decade, which have been reflected in new considerations for the infant testing algorithm. These include moving towards multi-timepoint nucleic acid testing (NAT), confirmation of positive results, and routine HIV testing for infants and children with unknown HIV status when admitted for inpatient care or attending malnutrition clinics. Time to ART initiation has significantly improved with POC testing compared to standard of care (SOC) testing, as well as expected long-term cost effectiveness - resulting in strong recommendations for national programmes. Dr Vojnov finalised noting that integrated testing across programmes optimizes device utilization and increases testing rates, and ultimately POC testing will enable faster clinical action and ART initiation.

Dr Bindiya Meggi described the steps followed to incorporate POC early infant diagnosis (EID) in Mozambique and reported results from studies evaluating the impact of this implementation and showing the overall improvements in both diagnostic and treatment timeframes. Further monitoring of POC implementation in 2018 showed improved access to EID and faster linkage to ART, demonstrated non-laboratory staff proficiency at operating POC devices, cost-effectiveness in low-resource settings and similar feasibility of EQA when compared to SOC testing. Currently there are 137 POC sites deployed across 11 provinces, many certified trainers of trainers at provincial level, and a wide breadth of professionals, including non-laboratory personnel, operating POC devices. Dr Meggi emphasized the importance of networking and partner buy-in and support, strengthening data systems and decentralization of testing and mentioned some challenges such as coordination among partners and stakeholders, need of continued training and availability of pediatric antiretroviral formulation for younger babies. Moving forward, and already being piloted, POC viral loads will be integrated into existing POC platforms, and both EID and viral loads will be tested at birth, with EID being prioritised.

Useful links (click on blue text)

Webinar recordings *: AR, EN – FR – RU – PT – SP
Presentations: Dr Lara Vojnov – Dr Bindiya Meggi
Questions answered by the presenters: EN

WHO guidance documents: Updated recommendations on HIV prevention, infant diagnosis, antiretroviral initiation and monitoring (2021)
Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring (2021)

* The interpretation of proceedings serves to facilitate communication and does not constitute an authentic verbatim record of the proceedings. Only the original speech is authentic.