Introducing Pneumococcal Conjugate Vaccine (PCV) & Rotavirus Vaccine Workshop

South Sudan National Immunization Technical Advisory Group (SS NITAG)

14TH September 2023

Presentation Outline

- **SS NITAG establishment history**
- 2. SS NITAG Structure and members
- **SS NITAG Vaccine recommendations to date**
- Specific considerations and/or recommendations relating to PCV and rotavirus vaccines
- 5. SSNITAG challenges in making recommendations
- 6. SSNITAG objectives from this workshop

1. South Sudan NITAG establishment history

- The SS NITAG was first established through ministerial order on 21st January 2013
 - The secretariate (EPI) and 2 core members were trained in Nairobi in August 2014.
 - Operations never started; re-organization was proposed.
 - A concept note that describes the SSNITAG structure, mandate and operations was developed with support from the SIVAC Initiative (Supporting Independent Immunization and Vaccine Advisory Committees).
- Tenure = 4 years
 - quarterly and extraordinary meetings; open or closed
 - Other duties evidence-based recommendations, advice and give guidance on vaccines and notifiable diseases of concern

SSNITAG establishment history...cont

- The Concept Note (Internal Procedures' Manual) served as a basis for re-establishment of the SSNITAG through a ministerial order on 22nd January 2016.
 - The SSNITAG comprised of eleven (11) core and ten (10) non-core members.
 - Orientation workshop was conducted by SIVAC Initiative from 28th March to 4th April 2016.
- The SSNITAG was re-established through another ministerial order on 7th December 2022
 - A training (Evidence to Recommendation) was done in Kampala (6th to 10th February 2023) - South Sudan, Uganda, Botswana and Liberia.

2. SSNITAG Structure and Members



3. Vaccine Recommendations To Date

- BCG (Baccille-Calmette Guerin): at birth (0 age), routine
- Pentavalent Vaccine (DTwP-Hib-HepB): 6 weeks, 10 weeks and 14 weeks, routine
- Measles Vaccine: 9 months, routine
- Oral Polio Vaccine (OPV): 6 weeks, 10 weeks and 14 weeks, routine
- Inactivated Polio Vaccine (IPV): 14 weeks and 9 months, routine
- Tetanus toxoid and diptheria vaccines: Women of child-bearing age (15 yrs – 45 yrs)
- **COVID-19 vaccine**: (Oxford–AstraZeneca, Janssen/J&J), adults yrs 18 and above, non-routine
- Oral Cholera Vaccine (OCV): emergencies

Vaccine Recommendations To Date - cont

- Pipeline:
 - Malaria vaccine: to be introduced next year (2024)
- Planned:
 - PCV & Rotavirus: ongoing discussions
 - Yellow fever
- Obstacle = co-financing
- Meningitis
- Hepatitis B birth dose _____ Obstacle = financing

• Thoughts:

- Ebola
- Typhoid

4. Specific considerations – PCV & Rotavirus infections

- SHHS (2010) probability of dying before 5 yrs at 105/1000 live births and before 1 year at 75/1000 live births. On average, 34% children <5yrs experienced diarrhea 2 wks prior to the survey.
- UNICEF Press Release, 2019: Pneumonia kills a child every hour in South Sudan and it is responsible for 20% of under-five deaths in 2018.
- 2022 Global Humanitarian Report cites water, sanitation and hygiene as the driving forces behind increases in water and vector borne diseases (e.g., watery diarrhea, typhoid, malaria)
- The South Sudan HMIS mid-year report, 2022 listed Malaria, URTI/pneumonia and acute diarrhea among the top 5 causes of OPD attendance and in-patient admissions.

4. Specific considerations – PCV & Rotavirus, morbidity

• HMIS mid-year report 2022: URTI, acute diarrhea and pneumonia - top five causes of OPD attendance and in-patient admissions.



4. Specific considerations - PCV & Rotavirus, mortality

• HMIS mid-year report 2022: Pneumonia, URTI and acute diarrhea - top five causes of inpatient mortality



4. Specific considerations...intervention

- WHO position paper on PCV vaccine (2019) and rotavirus vaccine (July 2021)
 - clinical significance of pneumococcal and rotavirus infections,
 - effectiveness of available vaccines
 - need for intervention
- GAVI report on extraordinary impact of pneumococcal vaccines cites a 95% reduction in the incidence of pneumococcal meningitis in fully vaccinated infants, and the efficacy against all pneumococcal invasive disease was >97%
- The Lancet (2020) and PATH (Nov 2021): elaborated on the effectiveness of rotavirus vaccines (Rotarix & RotaTeq) in preventing rotavirus diarrhea

4. Specific considerations...intervention

- The SAGE evidence to recommendation framework, product choice impact PCV13 vs PCV10
- The SAGE evidence to recommendation framework (RotaTeg, Rotarix, Rotavac and Rotasiil) – # severe disease and deaths averted is high.
- SSNITAG more research/conduct discussions/seek guidance on:
 - Best vaccine type(s) to adopt
 - Vaccine sources, including funding
 - Vaccine schedules
 - Considerations about existing equipment, infrastructure and training needs, etc.

5. SSNITAG challenges in making recommendations

- Absence of a multiyear workplan and budget.
- Lack of a Monitoring, Evaluation, Surveillance framework and a Research Agenda
- Limited capacity/understanding (of members) in conducting evidence to recommendations' procedures
 - Regular refresher trainings on standard procedures,
- Non-comprehensive and outdated TORs (aka Internal Procedures Manual)
 - Needs review/updating

SSNITAG challenges in making recommendations

- Limited operational support
 - Dedicated office space, logistical support, and full-time staff to manage the secretariate
- Limited space at the national vaccine store (managed by UNICEF)
 - Vaccine cold chain expansion and management (by gov)
 - Public/Private engagement
- Limited exposure and networking
 - Membership with international and regional NITAG associations e.g., Global NITAG Network

6. SSNITAG objectives from this workshop

- By the end of this meeting, South Sudan will be recommended to introduce PCV & Rotavirus vaccines in 2024.
- By the end of this meeting, the SSNITAG will develop an annual schedule of trainings and networking opportunities for its members, to improve their understanding and efficiency in vaccine decision making.
- By the end of this meeting, the SSNITAG will identify technical support to facilitate the development of its workplan, M&E plan & research agenda, and update its TORs (aka internal Procedures Manual), to guide its activities.

