Introducing Pneumococcal Conjugate Vaccine (PCV) & Rotavirus Vaccine Workshop

South Sudan National Immunization Technical Advisory Group (SS NITAG)

14TH September 2023
Presentation Outline

1. SS NITAG establishment history
2. SS NITAG Structure and members
3. SS NITAG Vaccine recommendations to date
4. 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 21\textsuperscript{st} 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 22\textsuperscript{nd} January 2016.
  • The SSNITAG comprised of eleven (11) core and ten (10) non-core members.
  • Orientation workshop was conducted by SIVAC Initiative from 28\textsuperscript{th} March to 4\textsuperscript{th} April 2016.

• The SSNITAG was re-established through another ministerial order on 7\textsuperscript{th} December 2022
  • A training (Evidence to Recommendation) was done in Kampala (6\textsuperscript{th} to 10\textsuperscript{th} February 2023) - South Sudan, Uganda, Botswana and Liberia.
2. SSNITAG Structure and Members

- SSNITAG
  - Chair, Deputy Chair

- Secretariat

  - Core Members (11)
  - Non-Core Members
  - Ex-Officio Members (5)
  - Liaison Members (5) (PH Association, JSI, DFCA, WHO & UNICEF)
  - National Immunization Program & IDSR Program
  - Liaison Members (UNICEF, WHO, JSI)
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
  • Meningitis
  • Hepatitis B birth dose

• 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 secretariat

• 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.