Country experiences on implementing the SOS stool method with Xpert MTB/Rif: lessons learned

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16 October 2020
KNCV Simple One-Step (SOS) Stool method

- Developed by KNCV and announced at Union of 2018
- First presented in annual Child & Adolescent TB working group meeting in 2019
- As simple as sputum testing with Xpert
- Feasible to perform at every GeneXpert site without need for additional materials
- Only short training required for Xpert staff
Studies and implementation projects that we are involved in

- **Accuracy study:** comparing Xpert stool with Xpert + culture of NGA/sputum
- **Piloting routine implementation for children & PLHIV**
- **H2H comparison studies w. FIND & TB Speed**
- **Modeling impact and cost-effectiveness of SOS stool method at primary health care level w. Sheffield University**
- **Demonstration at peripheral sites**
- **Robustness of SOS stool method**
- **Other work coming up**

**Legend**
- H2H: Head-to-head
- SOS: Simple-one-step
- PLHIV: person living with HIV

**Robustness of SOS stool method**
Work on the SOS stool method indicates that:

- It can be feasibly implemented at peripheral and district level, with initial close monitoring and trouble shooting (Ethiopia, Indonesia, Vietnam)
- Training (incl. TOT) can be provided remotely (Vietnam)
- Head-to-head comparison studies suggest that there is no difference between the three stool processing methods
  - Currently estimating costs and impact of implementation of this method at peripheral level (modeling study)
- It can be used for children and adults (living with HIV) (Vietnam, Zambia)
- It can probably also be combined with other (transport) buffers (Zambia)

- Awaiting results of SOS stool robustness study (Ethiopia)
- More work coming up
Next steps

- Complete studies for further evidence on SOS stool method:
  - Accuracy
  - Robustness, incl validation with sample transport buffer
  - Head-to-head comparisons

- Gain more experience with pilot implementation projects

- Finalize (online) SOS stool tool-box containing
  - Training, monitoring and supervision package
  - General implementation plan
  - Guidance on interpretation of diagnostic test results

- In collaboration with WHO to prepare a quick guideline of stool processing methods

- Create community of practice
Acknowledgements

• Ethiopian Public Health Institute, NTP Ethiopia, KNCV Ethiopia
• NTP Vietnam, KNCV Vietnam
• Collaborators on all other SOS stool method-related work
• All healthcare workers, laboratory staff, patients involved
• Funders of the diverse studies and projects
• Staff of KNCV The Hague