10th ECTMIH
16-20 October 2017 - Antwerp, Belgium

Free access to Digital Health Information in Tanzania

Christine Holst, Josef Noll and Andrea S. Winkler (University of Oslo)

Basic Internet

cystinet africa
Cysticercosis and Taeniosis Network of Sub-Saharan Africa

The Research Council of Norway

UiO : Global Health

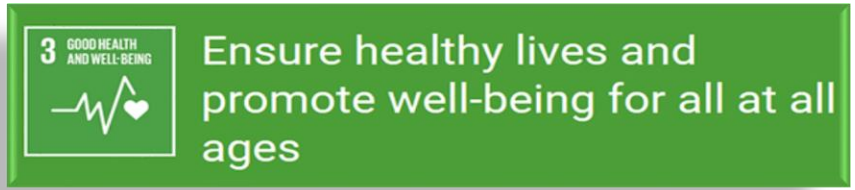
Sokoine University of Agriculture 1984 Ardhi ni Hazina

National Institute for Medical Research

Technische Universität München

Why is Digital Health important in Tanzania?

- Digital inclusion is the key for sustainable development
- Digital health related to SDGs



UiO : Global Health

Project structure

- Funding from Norwegian Research Council (1.6 M €)
- Project runs from Jan 2017 – Jan 2020
- 11 partners from Tanzania, DR Congo, Rwanda, Serbia, Germany, France, Spain and Norway
- Multidisciplinary approach - IT and health research
- InfoInternet in:
  - Phase A: 3 villages
  - Phase B: 10 villages

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Digital Health Education Intervention

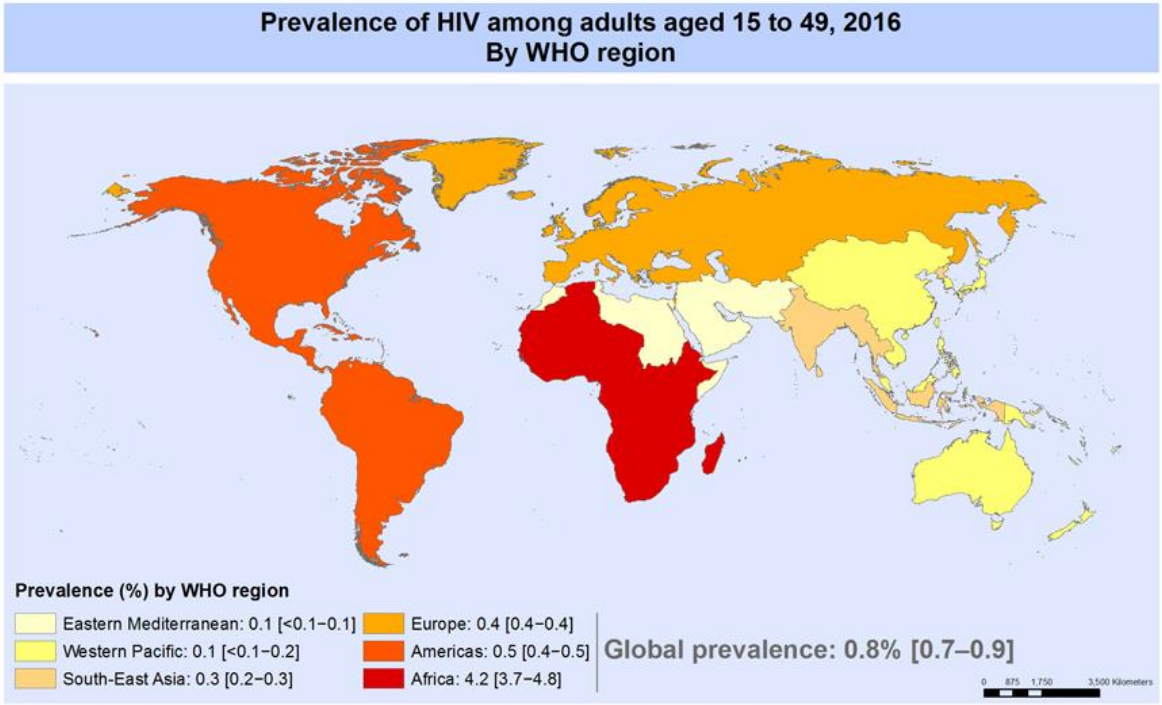
- Developing appropriate health messages within:
  - One-Health diseases, *Taenia solium* cysticercosis / taeniosis (TSCT)
  - Tuberculosis and HIV
  - Anthrax
- Synergies with CYSTINET-Africa
- Providing access to free digital health information
  - Through InfoInternet in local health facilities

HIV / AIDS

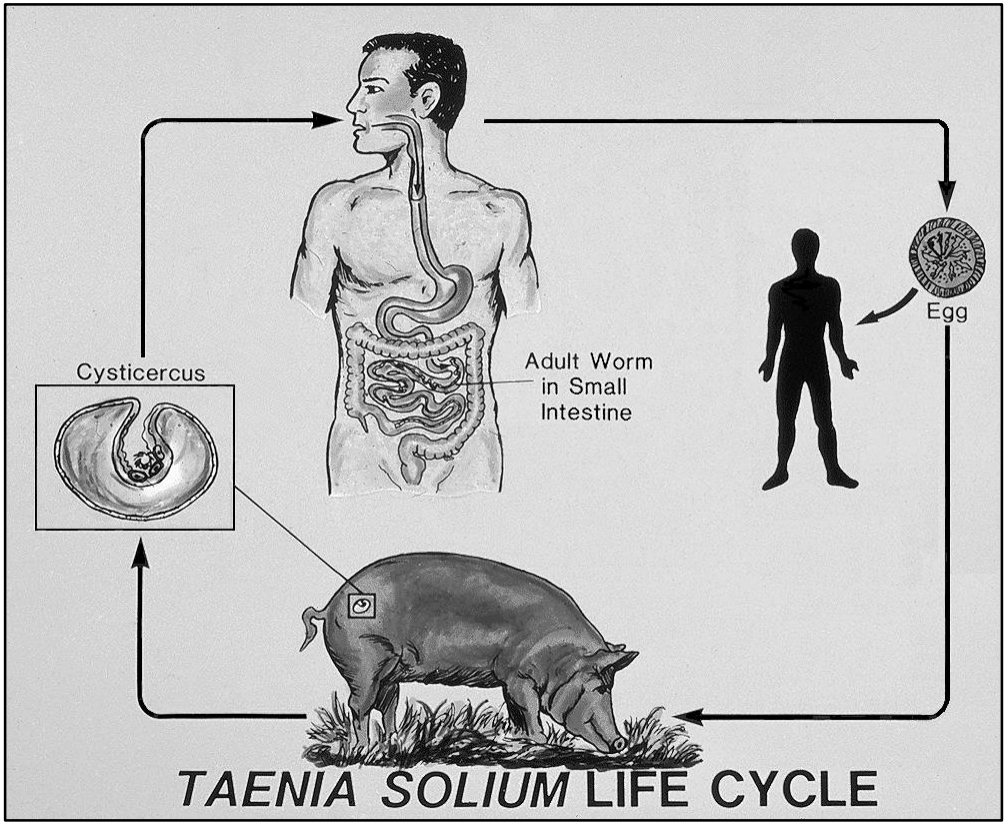
- **36.7 million**
- 35 million lives so far
- 1.8 million people becoming newly infected in 2016 globally
- African Region is the most affected region, with 25.6 million people living with HIV in 2016

Source: WHO **HIV/AIDS** facts 2017

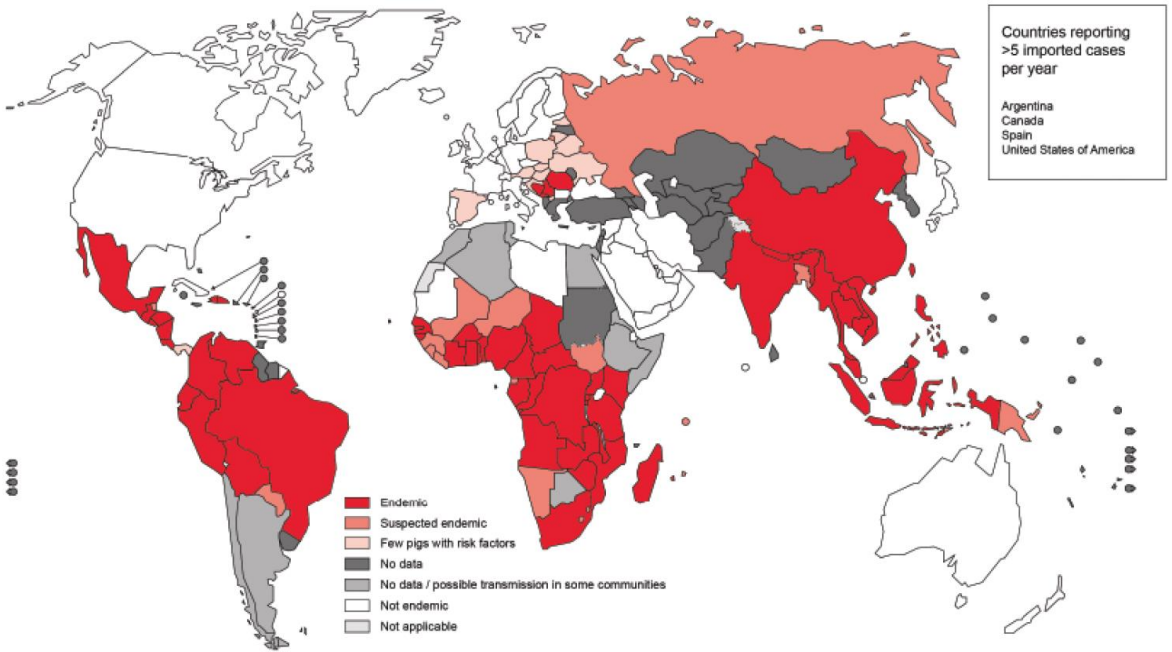
Prevalence HIV, 2016



Life cycle of *Taenia solium*



Distribution of *Taenia solium* infection worldwide, 2015



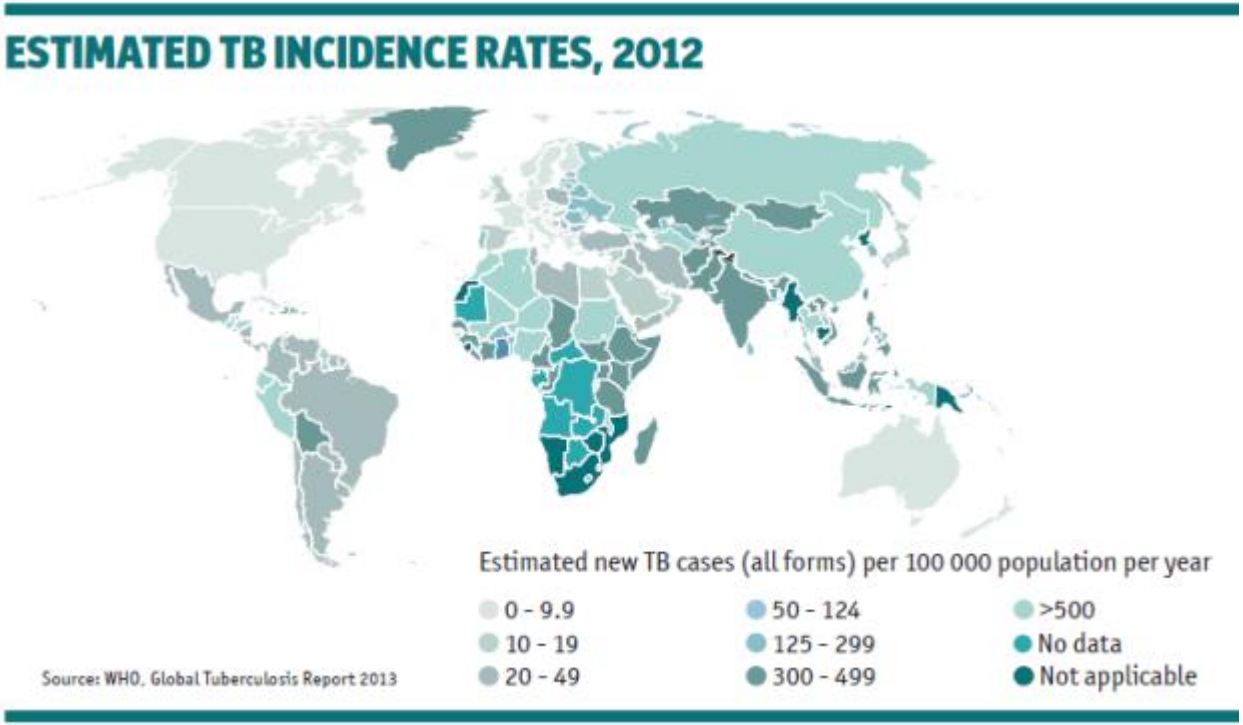
Source: WHO (2016) *Taenia solium* taeniasis/cysticercosis diagnostic tools, report of stakeholder meeting, December 2015
http://www.finddx.org/wp-content/uploads/2016/06/Taenia-solium-Taeniasis-cysticercosis-diagnostic-tools.pdf

Tuberculosis

- **10.4 million** new TB cases in 2015
- Tuberculosis (TB) is one of the top 10 causes of death worldwide.
- In 2015, 1.8 million died from the disease
- TB is a leading killer of HIV-positive people: in 2015, 35% of HIV deaths were due to TB.

Source: WHO **TB** facts 2017

Tuberculosis



Pilot installation: Africa@Kjeller

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Timeline

To assess existing knowledge and attitudes

To explore changes in knowledge and attitudes

Ethical approvals and registrations
Q4, 2017

Baseline study
Q1, 2018

Health Education Intervention
Q2, 2018

Endline study
Q1, 2019

How effective is the Health Education Intervention in order to improve knowledge and attitudes related to HIV/AIDS, TB and TSTC in intervention villages?

Cluster Randomised Trial

- Pre and post intervention to explore knowledge and attitudes, via questionnaires
- Study area: Mtera, Izazi and Selela, in addition to 3 control villages
- Sample size: +/- 2000 people to be followed up
- 3 research assistants from Sokoine / NIMR
- 12-15 days in each villages

Expected publications

- Digital Health Education Interventions in Sub-Saharan Africa: A systematic review
- Digital Health Education Interventions for improving knowledge and attitudes on HIV/AIDS and Tuberculosis – A cluster randomised trial in Tanzania
- Digital Health Education Interventions for improving knowledge and attitudes on *Taenia solium* Cysticercosis and Taeniasis – A cluster randomised trial in Tanzania

Thank you, all DigI Partners

Poster 5P28 displayed Thursday.

Thank you for listening!

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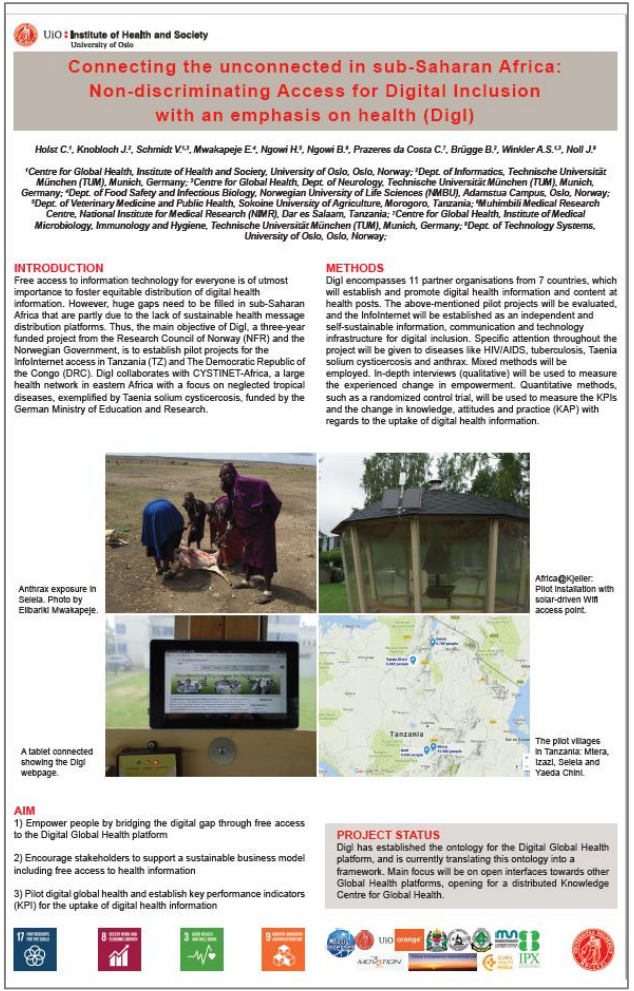

UiO : Institute of Health and Society
University of Oslo

Connecting the unconnected in sub-Saharan Africa: Non-discriminating Access for Digital Inclusion with an emphasis on health (DigI)

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INTRODUCTION

Free access to information technology for everyone is of utmost importance to foster equitable distribution of digital health information. However, huge gaps need to be filled in sub-Saharan Africa that are partly due to the lack of sustainable health message distribution platforms. Thus, the main objective of DigI, a three-year funded project from the Research Council of Norway (NFR) and the Norwegian Government, is to establish pilot projects for the InfoInternet access in Tanzania (TZ) and The Democratic Republic of the Congo (DRC). DigI collaborates with CYSTINET-Africa, a large health network in eastern Africa with a focus on neglected tropical diseases, exemplified by Taenia solium cysticercosis, funded by the German Ministry of Education and Research.

METHODS

DigI encompasses 11 partner organisations from 7 countries, which will establish and promote digital health information and content at health posts. The above-mentioned pilot projects will be evaluated, and the InfoInternet will be established as an independent and self-sustainable information, communication and technology infrastructure for digital inclusion. Specific attention throughout the project will be given to diseases like HIV/AIDS, tuberculosis, Taenia solium cysticercosis and anthrax. Mixed methods will be employed. In-depth interviews (qualitative) will be used to measure the experienced change in empowerment. Quantitative methods, such as a randomized control trial, will be used to measure the KPIs and the change in knowledge, attitudes and practice (KAP) with regards to the uptake of digital health information.

Anthrax exposure in Selela. Photo by Elbariki Mwakapeje.

Africa@Kjeller: Pilot installation with solar-driven Wifi access point.

A tablet connected showing the DigI webpage.

The pilot villages in Tanzania: Mtera, Izazi, Selela and Yaeda Chini.

AIM

1) Empower people by bridging the digital gap through free access to the Digital Global Health platform

2) Encourage stakeholders to support a sustainable business model including free access to health information

3) Pilot digital global health and establish key performance indicators (KPI) for the uptake of digital health information

PROJECT STATUS

DigI has established the ontology for the Digital Global Health platform, and is currently translating this ontology into a framework. Main focus will be on open interfaces towards other Global Health platforms, opening for a distributed Knowledge Centre for Global Health.