COFER – One Health: Creating a framework for developing effective nutrition and One Health interventions

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Overview One-Health

Work Packages

WP-1: Capacity building to modernise academic teaching

WP-2: Mobile tools for conducting dietary assessment surveys

WP-3: Mobile community-based solutions for syndromic surveillance and response systems

WP-4: Behavioural economic approaches to make interventions more effective at household and environmental levels
WP-1: Capacity building & Teaching

MOOC One Health curricular integration in Cayetano University, Yomo Kenyatta University, Jigjiga University
WP-1: MOOC One-Health

https://www.futurelearn.com/courses/one-health

Online course re-run October 2019
WP-1: One-Health Textbook

2nd edition in preparation for 2020
French Translation 2019
Korean Translation 2019

One Health
The Theory and Practice of Integrated Health Approaches

Edited by Jacob Zinsstag, Swiss Tropical and Public Health Institute, Switzerland, Esther Schelling, Swiss Tropical and Public Health Institute, Switzerland, Maxine Whittaker, University of Queensland, Australia, Marcel Tanner, Swiss Tropical and Public Health Institute, Switzerland and David Waltner-Toews, University of Guelph, Canada

A practical book which examines the origins of One Health and discusses how to put policy into practice
WP-1: Country Cases Online

Country Cases Online

One Case Study from each country (partner):
- builds One Health competencies
- shared among partners
Country Cases Online

Guidelines for building a Case Study

• How to select it?
• How to build it?
• How to use/present it?

Case Study Package (model)

• Core Document (Info / Resources)
• Presentation
• Exercise / Evaluation Matrix
• Solution to Exercise
Neurocysticercosis Case Study (Peru)

- Core Document (Info / Resources)
WP-2: Mobile tool for dietary assessment

Dietary Assessment System
Manage nutrition facts and assessment surveys

You are logged in as user "admin".

Create New Assessment

Start Date
mm/dd/yyyy

Child

Gender

Enumerator

Participant

Interviewer Type

Add new or edit a Meal

ID
1

Assessment Day
Day 1 (Assessment: #1)

Preparation Date
Nov 15, 2018, 5:01:08 PM

Consumption Time
Nov 15, 2018, 5:01:10 PM

Meal Preparation Place
At home-leftovers

Preparation Date
Nov 15, 2018, 5:00:21 PM

Consumption Time
Nov 15, 2018, 5:00:23 PM

Meal Preparation Place
At home

Preparation Date
Nov 15, 2018, 5:01:25 PM

Consumption Time
Nov 15, 2018, 5:01:26 PM

Meal Preparation Place
Outside home

Food items (ingredients or dishes)

Weight (g)

Food item

Preparation Method

32

Tosti Mayal (Egg Toast)

Baked or roasted

400

White Chapati

Baked or roasted
Developing a prototype of mobile tool for dietary assessment surveys

Initial prototype variants:

• Responsive web application with mobile device support
• PDF forms as an alternative and fall-back option
• Smartphone application with backend (DB) for IOS and Android

Have’s & Outlook

➢ Testing at Jomo Kenyatta University ongoing
➢ Main implementation of application including responsive front-end as well as server back-end with services and relational database
Developing a prototype for mobile syndromic surveillance

System for capturing critical incidents (incl. human and animal syndromes as well as human and livestock demographics)
• Implemented with React for iPhone (iOS) and Android
• System design similar to Swiss REGA application
• Server back-end with administration web front-end, services and database generated with Jhipster

Have’s & Outlook

➢ Currently, prototype with responsive web front-end for mobile devices deployed on hosted server for testing purposes
➢ Testing is to take place mainly within the framework of JOHI
Jigjiga One Health Initiative (JOHI)

**JOHI:** is a *research and development* partnership between the Jigjiga University, Armauer Hansen Research institute (AHRI), Swiss Tropical and Public Health Institute (Swiss TPH) and associated partners funded by Swiss Agency for Development and Cooperation (SDC)

**GOAL:** To improve the *health and well-being* of pastoral communities in Somali region of Ethiopia
President Sommaruga to pay official working visit to Ethiopia

Bern, 23.10.2015 - Ethiopia and Switzerland want to further intensify and strengthen good bilateral relations. It is with this aim that a Swiss delegation led by President Simonetta Sommaruga will be traveling to Addis Ababa this weekend.

- JJJU capacity building (MSc & PhD)
- Establishment of OH diagnostic centre
- OH graduate program in the curricula

On Sunday, the Swiss delegation will launch a new health project in eastern Ethiopia. This project - carried out by Jijiga University and the Swiss Tropical and Public Health Institute in Basel - is supported by the Swiss Agency for Development and Cooperation (SDC).
Team composition

- Health professional
- Veterinarian
- Nutritionist
- Ecologist
Capacity building to date: «3 students and 5 degrees»

- 2 MSc and 3 PhD students (Seid, Kadra and Yahya)

Applications
- Syndromic & environmental surveillance (Yahya and Seid)
- Nutrition assessment (Kadra)
Next steps – COFER «One-Health»

Work Packages

WP-1: - First experience of One Health MOOC in Ethiopia, Kenya and Peru
   - Country case studies implemented in student body and discussed on online collaboration platform

WP-2: (Semi-) automated analysis of dietary survey data

WP-3: Accelerate detection of emerging zoonoses based on mobile community-based solutions for syndromic surveillance

WP-4: Design interventions based on behavioural economic insights and test them in real-life settings