



TechnoHealth Surveillance Newsletter



Volume 1, Number 6

August 2016

Editorial address

TechnoHealth Surveillance
Newsletter
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From the Editor's Desk

Dear reader,

The Editorial Committee welcomes you to the 6th edition of *TechnoHealth surveillance*.

We are delighted to have developed a training manual for Community Health Reporters (CHRs) and other health stakeholders, which is described in this issue. Kindly find in this issue how SACIDS has expanded further its workforce on the implementation of its innovative idea of training and engaging community health reporters in the detection, recording and reporting of health events in humans and livestock population using digital technology. In addition, we are pleased to have showcased our research outputs during the 11th Exhibitions on Higher Education in Tanzania.

All together, the feedback from our esteemed readers has kept us motivated and toned to respond to their interests. We look forward to your feedback and comments on this 6th edition.

Kindly do not hesitate to share with us stories on health related events occurring in humans, animals and environment for the sustainability of our newsletter.

We wish you an informative read!

Enjoy your reading!

SACIDS develops training manual for community-based participatory disease surveillance

A training manual on community-based participatory disease surveillance was developed through the *Enhancing Community-based Disease Outbreak Detection and Response in East and Southern Africa (DODRES)* Project supported by Skoll Global Threats Fund (SGTF).

In order to facilitate participatory community-based One Health disease surveillance, SACIDS has developed a training manual (in Kiswahili) for Community Health Reporters (CHRs) and other health stakeholders. The training manual describes characteristic and roles of CHRs, strategies for their integration in the community, ethical consideration during the provision of health care services, and collection and submission of health data to relevant authorities. In addition, the manual describes the salient clinical manifestations of priority human and animal diseases. The manual has also used descriptive images to facilitate recognition of clinical signs to be diagnosed and reported by the CHRs and other community members. Furthermore, prevention and control measures for each priority human and animal diseases have been included in the training manual.

The priority human disease conditions included in the manual are Dengue, Ebola virus disease,

Marburg Virus Disease, Crimerian-Congo Haemorrhagic fever, Rift Valley fever, Cerebrospinal Meningitis, Anthrax, Rabies, Avian Influenza, Plague, Measles, Typhoid fever, Cholera, Malaria and Yellow fever.

The priority animal diseases include Foot and Mouth Disease, Rift Valley fever, Malignant Catarrhal fever, African swine fever, Peste des petits ruminants, Brucellosis, Trypanosomosis, Newcastle Disease, Contagious Bovine Pleuropneumonia, Contagious Caprine Pleuropneumonia, Lumpy Skin Disease, Anthrax, Rabies and Avian Influenza.

The training manual describes the application of Information, Technology and Communication (ICT), including the use of mobile smart phones in disease surveillance to enhance early detection, timely reporting and prompt response to disease outbreaks. The SACIDS ICT tools have been branded *AfyaData*, and will be used for capture and reporting of health events from the community to district levels.

Another tool that has been described in the manual is the *WhatsApp* messaging application to facilitate active exchange of information, questions and responses between CHRs, health and ICT specialists in real-time to address human and animal health challenges facing the communities.

SACIDS conducts training on the use of digital technology in community-based disease surveillance

The Southern African Centre for Infectious Disease Surveillance (SACIDS) has expanded further its workforce on the implementation of its innovative idea of training and engaging community health reporters (CHRs) in the detection, recording and reporting health events in humans and livestock population using digital technology, mobile phones in particular.

Through the DODRES project, SACIDS has conducted training of key stakeholders, from human and livestock health sectors, on the application of digital technology in community-based disease surveillance using One Health approach. The aim of the training programme was to promote community level One Health security through improved outbreak detection, early communication and rapid response to enhance disease prevention and control at the source.

The training was conducted from June 29 to July 5, 2016 and from July 18 to 24, 2016 in Morogoro Urban and Ngorongoro Districts, respectively. Trainees were drawn from DODRES study sites that included 11 villages and seven streets (herein after also referred to as villages) in Ngorongoro and Morogoro Urban districts in Tanzania, respectively.

In addition, participants were trained on how to recognize clinical manifestations of epidemic prone human and livestock

diseases, their prevention and control measures.

A total of 53 participants were trained in Morogoro and Ngorongoro including 29 CHRs, nine officers-in-charge of health facilities, eight Livestock Field Officers, two Integrated Disease Surveillance and Response Focal Persons, one Livestock Data Manager, two District Medical Officers and two District Veterinary Officers.



The Acting Executive Director for Morogoro Urban District, Mr. Michael Waluse (5th from right) in a group photograph with trainees and trainers

The training package included theory and practical sessions on the application of Information, Communication and Technology (ICT) tools in disease surveillance, ethics and best practices during the provision of health care services, collection and submission of reports of health events to relevant authorities.



Group practices on the use of AfyaData tool to capture health data



"I am happy, three AfyaData forms that I have just completed have been effectively posted to the SACIDS server" A CHR, Ms. Sutek Sumuleki (1st left), witnesses to her fellow trainee, Mr. Mathew Charles



The Ngorongoro District Veterinary Officer, Dr. Choby Chubwa (centre) leading a discussion on how to create strong linkages between community and healthcare systems using One Health approach

All trainees (with exception of DMO, DVO, IDSR focal persons and livestock data manager) were provided with android phones installed with AfyaData, which is a SACIDS mobile phone digital surveillance tool designed for capturing and reporting of health events from the community to district levels. The paper-based data capture forms for human and livestock official surveillance systems were digitized and installed in the smart phones. The In-charges of health facilities and Livestock Field Officers were trained on how to use the digitized forms to capture and submit disease data to district level.



The Ngorongoro District Medical Officer, Dr. Omari Sukari (in white-spotted dark blue shirt), leading a discussion on potential effectiveness of AfyaData digital tool over paper-based tool in disease surveillance

All CHRs were trained on how to refer patients to health care facilities and were provided with referral forms. In addition, the trainees-specialist WhatsApp group network was established to facilitate sharing of experience, challenges and solutions. The CHRs from Ngorongoro were provided with solar chargers to facilitate charging the mobile phones as an alternative power source.



Trainees practicing on household visit to provide health care services and collect health data using AgyaData tool



A CHR, Mr. David Meipuki, charging his mobile device using solar charger

The trained individuals were provided with certificates of participation and letters of introduction to community leaders.



A trainee, Mr. Thobias Chacha (left), receives certificate of participation from the Guest of Honour, Mr. Michael Waluse, in Morogoro



A CHR, Mr. Kurenda Toroge, with his training certificate in Ngorongoro



SACIDS researchers in a group photograph with trainees in Ngorongoro

The training strengthened the established network between SACIDS, District authorities and CHRs in the study areas. Our plans within the next one month is to equip the district offices (human and livestock health sectors)

with computers to facilitate exploration of data being submitted by the trained individuals to inform prompt decision on disease control and prevention strategies.

SACIDS showcase innovations in disease surveillance during recent Tanzanian universities' exhibitions

The Tanzania Commission for Universities (TCU) held its 11th Exhibitions on Higher Education in Dar es salaam, Tanzania from July 20 - 22, 2016. The exhibitions provided a platform to promote research and development, collaboration, partnerships, build networks and linkages between higher education institutions and industry within Tanzania and beyond. The Southern African Centre for Infectious Disease Surveillance (SACIDS) had opportunity to showcase its on-going research prowess, achievements and various innovative techniques developed/being developed to tackle infectious diseases.

The Centre showcased various research tools and resources, including the SACIDS Techno-Health Innovative Lab. It also exhibited flyers, posters, books and policy briefs. The information, communication and education materials were provided to most of the visitors as take-home package.

A community radio demonstration and presentation on digital mobile disease surveillance attracted the attention of many visitors to the event. Speaking at the SACIDS booth, the Deputy Permanent Secretary, Ministry of Education, Science, Technology and Vocational Training Prof. Simon Msanjila commended the Centre efforts and its innovative ideas in research activities.



The Director General for Tanzania Commission for Science and Technology, Dr. Hassan Mshinda, at the SACIDS exhibition pavilion



SACIDS Communication Officer, Mr. Yunus Karsan (left), presenting research materials to Prof. Simon Msanjila (right), the Deputy Permanent Secretary, Ministry of Education, Science, Technology and Vocational Training

As a result of the exhibition, SACIDS increased its visibility and potential interest in its works. Approximately, 50-100 visitors per day visited the SACIDS booth. Please visit and like our Facebook page for more pictures of the Exhibitions <http://tinyurl.com/h5tt32u>.

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