

M.A. SANTE 2016 TECHNICAL REPORT

M.A. SANTE is a non profit organization with the objective to contribute in improving access to health care in Cameroon through health research, training and implementation of health interventions. In line with this objective, the organization conducted in 2016 activities on the following:

- DOVE Project (Delivering Oral Cholera Vaccine effectively) ;
- REMMOCC Project (Reducing the Morbidity and Mortality of Cholera in Cameroon);
- Student training, support and internships;
- CaHReF (Cameroon Health Research Forum).

1- DOVE Project (Delivering Oral Cholera Vaccine Effectively)

DOVE Project is fully sponsored by the Department of International Health of the Johns Hopkins University, USA. It is a multi-country project and aims at identifying efficient strategies to improve population's access to oral cholera vaccine (OCV).

In Cameroon, this project is implemented under the title: **“Sustainable Cholera Surveillance”**, aiming at identifying efficient strategy to anticipate and prevent a cholera outbreak by early detecting cases.

In 2016, this project was implemented in eight Health Districts of Cameroon including four in the Far North Region (Kousseri, Mada, Naga Goulfey) and four in Littoral Region (Nylon, Deido, New-Bell and Bonassama). These two regions were selected because they hosted the health district mostly affected by cholera outbreaks in Cameroon.

Strategies tested included:

- 1- Intensive cholera surveillance by using a more sensitive case definition and extending the lowest age of targeted population from 5 to one year old
- 2- The use of filter paper to collect stool samples from suspected cholera cases for PCR in laboratories
- 3- Anticipating cholera outbreak by conducting environmental surveillance of cholera.
- 4- Improving the Specificity and sensitivity of cholera rapid diagnostic test by incubation of stool samples in alkaline peptone water for six to eighteen hours at room temperature before testing it with RDT



Family picture of the supervisors training session at the Beginning of 2016 DOVE projects activities



Monitoring or DOVE activities in Nylon Health District (Douala)



Results dissemination meeting of the DOVE project with health authorities

As major outcome, the project identified the following strategies that can be used to improve cholera surveillance:

- 1- Incubation of stool samples from suspected cases of cholera in Alkaline Peptone Water (APW) increases the specificity of the dipstick (RDT). This improves case detection in remote areas where health facilities do not have access to a laboratory and/or power supply.
- 2- Stool samples can be collected on filter paper and transported to the laboratory for PCR confirmation. This improves cholera investigation rate as it increases the number of cases with samples collected for investigation as it can be use in community for samples collection and help collect samples in health areas with absence of laboratory or power supply. It can equally be used in the future to better describe and understand past outbreaks.
- 3- Direct stool collection on filter paper is helpful in investigating other bacterial, viral and parasitic causes of diarrhea

Quarterly financial and technical reports were done and sent to the donor partner, 02 meetings were organized with health authorities for discussion and use the results in health policy. Ten abstracts were submitted and presented in national forum and conference, 02 articles published scientific peer reviewed journals.

2- REMMOCC Project (Reducing the Morbidity and Mortality of Cholera in Cameroon)

This project is part of Global Health Security Agenda project sponsored by US Center for Diseases Control and Prevention, implemented in Cameroon by the International Medical Corps. M.A. SANTE is a sub-grantee of this project to implement the REMMOCC project.

In 2016, activities were implemented in four Health Districts including two health districts around the Lake Chad Basin (Kousseri and Mada) and two health districts in the Littoral Region (Deido and Nylon). These were implemented in order to reduce the burden of diarrheal diseases by visiting households of mostly affected villages to:

- 1- Assess population access to water, sanitation and hygiene (WASH);
- 2- Educate populations on the importance of WASH and methods to improve their access to WASH;
- 3- Train community volunteer on diarrhea management, offer oral rehydration solution (ORS) to trainees to rapidly handle population before referring them to hospitals;
- 4- Determine the distribution of diarrhea, collect and report cases by SMS.

On the other hand, the project equally targeted the health system through the health facilities in which the access to WASH at health facilities was evaluated and more than 98 health personnel in the various health facilities trained on cholera surveillance, preparedness and case management.

Six supervisors were hired and trained on conducting field activities. One hundred and sixty community health workers were hired, trained on conducting field activities. These included conducting households' visits, assessing access to WASH, educating the head of household on improving access to WASH, detecting and reporting cases of diarrhea, administering ORS, supplying aquatabs and referring cases of diarrhea to health facilities. Twenty six weekly supervisions and 12 monthly reports were drafted, shared with partners and discussed with health and community authorities.



REMMOCC; training session of community volunteers in Douala	Supervision of community volunteer in Douala	Supervision of community volunteers in Far North Cameroon
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3- CaHReF(Cameroon Health Research Forum) 2016 :

This was a conference initiated and organized by M.A. SANTE with the support of Cameroon Ministry of Public Health (MoPH), the Cameroon Society of Epidemiology (CaSE), the Center of filarial research, the Chantal Biya Foundation, the Faculty of Medicine and Biomedical Science (FMBS) of University of Yaounde I, The Johns Hopkins University, the South Africa Center of Research on Chronic diseases. It was organized in the Yaoundé Congress Hall with as theme **(Benefits of health research conducted by students)**. The aim was to improve access of health decision makers to results of health research conducted in Cameroon. It involved:

- 1- Encouraging students to submit their abstracts and participate in the Conference;
- 2- Inviting scientists and health professionals to submit abstracts and registered for the Conference;
- 3- Inviting researchers to evaluate and select abstracts to be presented during the conference;
- 4- Developing and producing conference kits (book of abstracts, conference agenda and other tools)
- 5- Organizing conference opening and closing ceremonies, planning sessions, parallel sessions, poster sessions, training sessions, Evaluating the conference and presenting outcome to decision makers.

Fifty five institutions participated in the conference. These include 21 public and private universities, 10 research institutions and 24 health facilities. Nine out of ten existing regions in Cameroon and 08 other countries including South Africa, Chad, Germany, USA, Madagascar, Ivory Coast, Benin, and Uganda participated in the conference. Six Hundred and nine participants were registered, including clinicians and other health personnel. Five plenary sessions, 171 presentations in parallel sessions and 16 training sessions were organized, 40 posters were presented to the public, 64 parallel sessions made.

From these presentations, recommendations were shared and discussed with health authorities to be taken into account when making health policies.



Opening Ceremony CaHReF 2016



Opening Ceremony CaHReF 2016



One of presentation sessions in CaHReF 2016



Visit of Posters in CaHReF 2016

4- Students' training and internships:

A seminar was organized involving 20 students and 10 scientists with the aim to train them on procedure to develop, implement and monitor a protocol of surveys. This seminar was done during 05 days with the collaboration of the Cameroon Ministry of Health, Division of Health Operation Research it involved 05 presentations and 05 working groups on protocol development aspects. From this, 10 students' research projects were developed and they defended publicly as student theses, submitted and presented in conference organized at national level. Two of these students were supported by M.A. SANTE and 05 involved in other projects implemented by M.A. SANTE.

Activities conducted in 2016 by M.A. SANTE contributed in improving access of population to care in domains of cholera, diarrhea and other health problem prevention and management. It also contributed in health system strengthening by:

- Supporting and training students
- developing capacity of health personnel in implementing their activities,
- Sharing and discussing results and lessons from implemented project with local health authority and scientists.

		
<p>One of students training sessions at M.A. Sante Yaoudé office</p>	<p>The 2016 M.A. Sante interns team</p>	<p>Involvement of interns in field activities</p>