



MEILLEUR ACCÈS AUX SOINS DE SANTÉ

A large blue graphic element with a white curved border at the top and bottom. The background is a collage of medical and scientific motifs, including a stethoscope, a hand holding a pill, a molecular structure of hexagons, a world map, and a microscope. The text 'M.A. SANTE ANNUAL REPORT, 2018' is centered in white, bold, sans-serif font.

M.A. SANTE ANNUAL REPORT, 2018

FEBRUARY, 2019
YAOUNDE, CAMEROON

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Overview

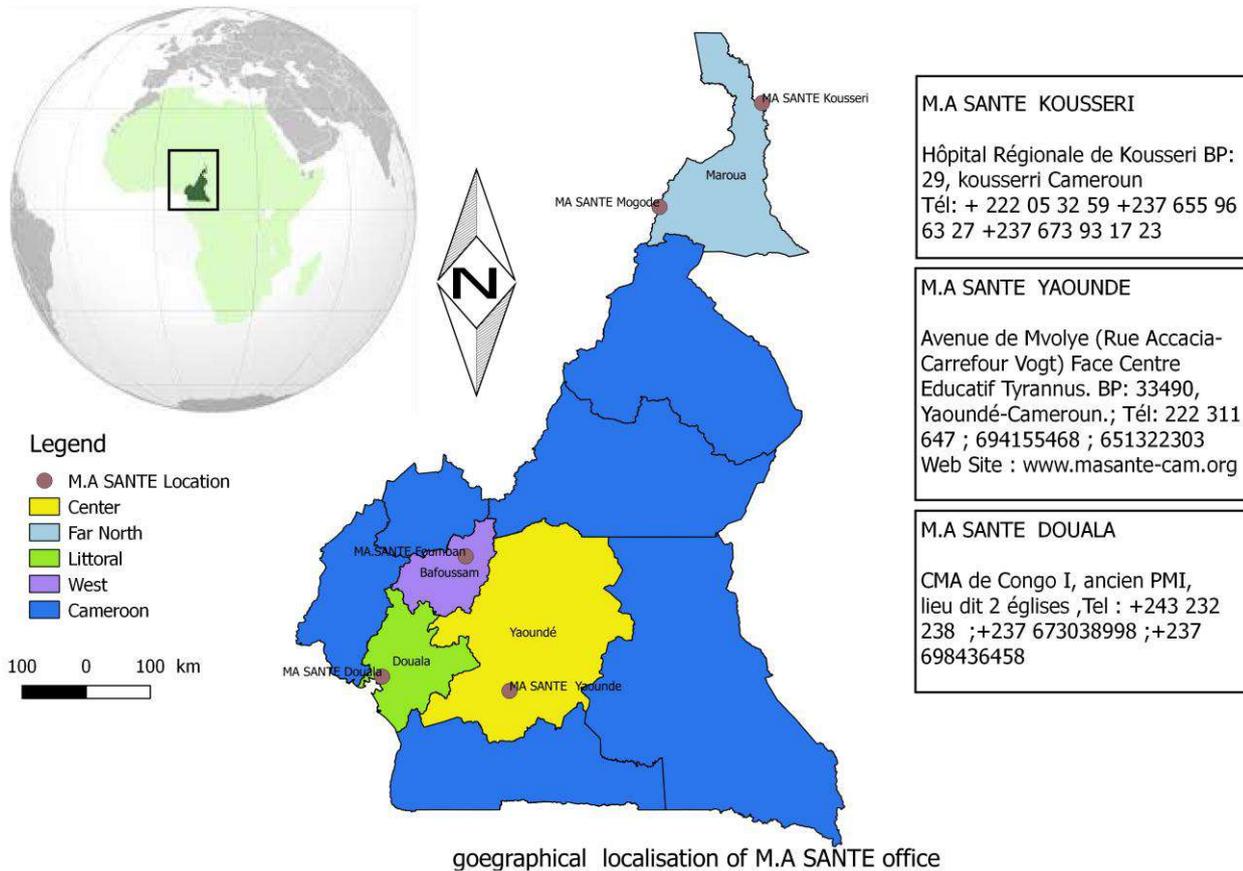
M.A. SANTE (Meilleur Accès Aux Soins de Santé) is a non-profit and apolitical organization with the objective to contribute in improving access to health care in Cameroon through health research, training and health interventions. M.A. SANTE was officially registered in Cameroon in 2006 and has been collaborating with the Cameroon Ministry of Public Health since 2011 in five domains namely: Prevention and control of outbreaks, promotion of access to WASH (Water, Sanitation and Hygiene), promotion of breastfeeding, Control of chronic diseases and promotion of access to safe drugs. In addition, M.A. SANTE has also developed collaborations with other local and international organizations focusing on research participants' protection, pharmacovigilance, research results dissemination, training of health personnel, researchers and graduate students and equally offering on-the-job training during internships. In line with this, M.A. SANTE has carried out to date 28 research and intervention projects in six regions of Cameroon covering 40 health districts.

Location and organization

M.A. SANTE's Headquarters is based in Yaounde-Cameroon with four field offices in Kousseri, Mogode, Douala and Foumban hosting three research laboratories. Field activities are organized and coordinated from these offices. Figure 1 presents of locations and address of M.A. SANTE's offices and Headquarters (See fig1: Cameroon Map of M.A. SANTE offices location and full addresses)

The policy of the organization is defined by a board. The technical team is led by a Project Coordinator and made up of 35 personnel including Medical Doctors, Public Health Specialists, Epidemiologists, Clinical Biologists, Laboratory Technicians, Medical Microbiologists, Nurses, Mathematicians; and an administrative and financial team (financial officers, administrators and logistician).

The organization has three laboratories equipped with alternative power supply, cold chain and vehicles to facilitate intervention, research and training projects among others.



Partnership

M.A. SANTE has been implementing projects supported by the Cameroon Ministry of Public Health (MoPH) at central and field levels; the Department of International Health, Bloomberg School of Public Health, Johns Hopkins University; The Center for Disease Control and Prevention through International Medical Corps; the US National Institute of Health; the Bill & Melinda Gates Foundation; and the Positive Action for Children Fund. The implementation of these projects has involved:

- Ministry of Public Health; Central level (Department of Disease Control, Department of Family Health, Department of Drug and Pharmacy and Division of Health Operations Research); Regional level (Far North, North, Littoral, Centre, West and South regional delegations of public health in Cameroon); and operational level (Forty health districts distributed in the up mentioned regions)
- Research institutions (the Centre for Research on Filariasis and other Tropical Diseases, the Chantal Biya International Research Centre, the Cameroon Society of Epidemiology, the Cameroon National Ethics Committee)

- Universities (Faculty of Medicine and Pharmaceutical Sciences of the Universities of Dschang and Faculty of Medicine and Biomedical Sciences of the University of Yaoundé I)

The organization has also been actively participating in national network and coordination meetings with NGOs and INGOs working on humanitarian activities.

M.A. SANTE 2018 projects

In line with M.A. SANTE objectives, this report highlights activities carried out by M.A. SANTE in 2018. During this period, 3 research projects, 4 intervention projects, Y projects on capacity building and 2 promotion of access to research results and research participant protection 5 projects were also developed for application.

A. RESEARCH PROJECTS

In 2018, we developed or continued the implementation of seven research projects focusing on epidemiological surveillance of infectious diseases, access to immunization, outbreak prevention, access to prevention of mother-to-child transmission of HIV, and malaria control. Of these, four are still under review for funding and three following are been implemented:

1. Epidemiology and Ecology of *Vibrio cholerae* in Africa-Cameroon (E2CHOLA)
2. Dose Interval Study for Cameroon (DISC)
3. Tracking Demographic Movements and Immunization Status to Improve Children's Access to Immunization (TDM-IAI)

1. E2CHOLA PROJECT

E2CHOLA project is an on-going five year project, funded by the US National Institute of Health through the Department of International Health, Bloomberg School of Public Health, Johns Hopkins University (JHU). It started in April 2017 with as objective to describe the differing epidemiological and ecological patterns of cholera in Cameroon in order to understand the nature of cholera emergence and transmission in this area of Africa. In 2018(January- December), the project was implemented in 22 health facilities including nine (09) in the Littoral region and thirteen (13) in the Lake Chad basin. It involved health facility-based cholera surveillance with the specificity of using a modified WHO case definition (01 year old and above), testing of suspected cases using improved RDT(dipstick) and PCR, and case reporting using ODK forms in Smartphones. The project also supported the investigation of cholera outbreaks in Cameroon health districts not targeted by the project. From January – December 2018, the following activities were carried out



Using RDT to test suspected samples



Cultured suspected samples petri dishes of isolate *Vibrio cholerae* bacteria

towards the realization of the E2CHOLA project objectives;

- The overall coverage for 2018 targeted activities was achieved. Each health facility implemented a 45 weeks surveillance during which 2314 diarrhoea cases were reported, 341 suspected cases detected and tested and 6 positive cases. Samples of suspected cases are being tested on PCR. The project also contributed in investigating four (04) cholera outbreaks in Centre, North, Far North and Littoral regions in Cameroon by assessing health facility preparedness and access to care for suspected cases in the community, investigating suspected cases.
- During a reactive immunization campaign organized by the Cameroon ministry of Public Health against a cholera outbreak that occurred in December 2018 in Makary health district (Far North region), the project team was involved in conducting monitoring and evaluation to improve immunization coverage.

Progress report of activities and preliminary results were shared with key actors involved in the fight against cholera in Cameroon during a result dissemination meeting that was organized by the Cameroon Ministry of Public Health at Djeuga Palace Hotel in Yaounde in May 2018 and during CaHReF2018 in Yaounde.

The project also supported the capacity building of M.A. SANTE by contributing in the renovation and equipping of its laboratory in Yaoundé.

Due to limited access of community cases to health facilities, the protocol is being modified to investigate community cholera suspected cases.

With the amended protocol, these modifications give more chances to the project to achieve its objective.



Collecting stool samples on filter papers molecular investigation



Training of CHW on how to use ODK collect software to collect data and report suspected cases



Investigating cholera outbreak at health facility level



Assessing availability of supplies at health facility for outbreak response



Investigating cholera outbreak and access to health care in the community by M.A. SANTE staff.



Assessing quality of external consultation registers as data sources for epidemiological surveillance of cholera

2. DISC PROJECT

DISC is an 18-month project conceived and implemented to assess whether the immune response of the second dose of oral cholera vaccine (OCV) administered at extended intervals (14 days, 06 months and 12 months) is equivalent to that of the manufacturer which is two weeks after the first dose. The results of this project are expected to serve as evidence to improve the use and efficiency of OCV during outbreaks.

This project started in September 2017 and is implemented in Soboum-Douala by M.A. SANTE research team with funding from the DOVE project. Till October 2018, the protocol, SOPs and data tools were developed and validated, the agreement with local health authorities was issued, ethical clearance and administrative authorization were obtained as well as vaccine importation permit. Vaccines, equipment, supplies were acquired. Human resource was recruited and trained, study site and laboratory was renovated.

Since October 2018, household visits were conducted to inform and invite households to participate in the study, take-off of the clinical phase of the project with enrolment of participants, randomization of 180 participants in three groups, vaccine administration per study group as stated in the protocol, sample and data collection to assess the effect of the intervention. Supervision, monitoring and data related activities are still ongoing. Final results are expected by October 2019.



Household visits by CHVs to inform and invit



participants in the study

Participant screening and enrolment in the study



Blood sample collection and Processing



Administration of OCV to study participants

3. TDM-IAI PROJECT

Access to immunization in Cameroon as in many African countries is still limited nowadays leading to frequent outbreaks of vaccine preventable diseases. TDM IAI is proposed to assess the effect of community-based tracking, registration and follow-up of children's immunization status and demographic movement on the completeness, timeliness and coverage of immunization among children 0-59 months. The TDM-IAI project is funded by the Bill & Melinda Gates Foundation through the GCE (Grand Challenges Explorations) and implemented in the Fouban Health District, West region of Cameroon. The project is meant to span from May 2018 to October 2019. The following activities were carried out in 2018;

- Developing, pretesting and validation of protocol and SOPs for the project;
- Obtaining the collaboration of Fouban district health authority.
- Submitting application for ethical clearance and administrative authorization of the project
- Hiring and training of project staffs, community volunteers and EPI (Expanded Program on Immunization) focal points
- Selecting and randomizing study communities based on preliminary data on immunization as collected from the field.
- Conducting baseline survey
- Launching of intervention in 32 clusters
- Conducting six (06) rounds of household-based intervention (visit of households by CHVs and collecting data on children immunization status and communicating information to CoCs (Chief of Centers) to plan for immunization sessions)
- Data management activities, supervisions and reporting of site activities and weekly coordination of project activities.

So far, all activities planned have been implemented and the intervention is ongoing. The in-process and end-line surveys are planned for March and September 2019 and preliminary results are expected by June 2019.



Training of CHVs and EPI focal points



Selecting study communities by EPI focal points and field team



Conducting baseline surveys at households
Launching of intervention in community



Household vaccination sessions in clusters



Carrying out supervision of EPI Focal points

B. INTERVENTION ACTIVITIES

With respect to health interventions, M.A. SANTE implemented four (04) projects, three (03) having external funders and one (01) funded by M.A. SANTE. These projects include;

1. Reducing Morbidity and Mortality of Cholera in Cameroon (REMMOCC);
2. Access to PMTCT services through the involvement of traditional birth attendants (TBA) in the program within the Logone and Chari Division, Far North region of Cameroon (AT-PTMEL);
3. African Response to Chronic Diseases (RAMAC);
4. OCV (Oral Cholera Vaccine) Mogode.

1. REMMOCC PROJECT

REMMOCC project aims to reduce the burden of cholera in Cameroon. It is implemented with the support of the Center for Disease Control and Prevention (CDC) through the International Medical Corps (IMC) as part of the Global Health Security Agenda (GHSA) project. The first two phases were carried out from May 2016 to September 2017 in the Far North and Littoral regions of Cameroon. The third phase started in October, 2017 and is expected to last for 3 years. Activities implemented in 2018 included;

- Training of 55 community health workers (CHWs) including 20 in two littoral Health districts and 35 in 02 health districts of the lake Chad basin, on detecting and reporting cases of diarrhea and suspected cholera cases, and on water treatment methods (solar disinfection and chlorination).
- In 15380 households, we conducted an assessment on access to water, hygiene and sanitation (WASH), training on water treatment methods and sensitization on WASH. Supervised trained CHWs, conducted Community-based surveillance of water seeking behaviours, diarrhea cases and supplied aquatabs and bottles for water treatment.
- From the community based surveillance 222 suspected cholera cases were detected and timely referred to health facilities.

Data collected from the surveillance of water seeking behaviours are being used to better orientate activities and improve access to WASH.



Teaching household on hand washing



Training households on SODIS method

2. AT-PTMEL PROJECT

In the Northern regions of Cameroon, most pregnant women deliver at home with the assistance of unskilled birth attendants. For this reason, these women have limited access to Antenatal care interventions. The objective of the AT-PTMEL (Involvement of traditional birth attendants in the prevention of mother to child transmission of HIV in the Logone and Chari division) project is to contribute in reducing mother to child transmission (MTCT) of HIV by improving access to PMTCT services with the involvement of traditional birth attendants (TBA). This project is funded by Positive Action for Children Fund (PACF) and implemented in 02 health districts of the lake Chad basin. The project spans from April 2018 to April 2020. The following activities were implemented during the year 2018:

- The recruitment and training of field and TBA supervisors on National PMTCT policies in Cameroon and AT-PTMEL project objectives, protocol and outcome.
- The mapping of TBA distribution and activities in the Logone and Chari division
- Assessment and respond to intervention needs to improve the delivery of PMTCT care service at health facilities.
- Training of 60 TBAs on HIV prevention, risks and modes of transmission from mother to child, community sensitization and mobilization for testing sessions and AT-PTMEL project activities for TBAs.
- Distribution of kits to TBAs (waterproof bed sheets, aprons, buckets, detergents, bleach, gloves and community awareness booklets) for aseptic and hygienic practices during delivery.
- Involvement of supervised TBA in detecting and referring of pregnant women to health facilities for HIV screening and care; Involvement of TBA in leading the organization of community sessions on HIV communication, screening, care and treatment.
- Facilitated the access of health facilities to PMTCT supplies;
- Data management and analysis activities;
- The total number of pregnant women screened for



Training of focal points by trained field supervisors



Training of TBAs by trained focal points



Community sensitization on PMTCT and HIV screening by TBAs



HIV screening activity in community



Distribution of aseptic and hygienic kits to TBAs for use during child delivery

HIV passed from x in August to y in December. All those screened received their results. Of the X number screened, y were HIV positive and z started their antiretroviral treatment. Of x exposed infants, y are under monitoring.

- . The project is ongoing in 2019 and is planning to increase the number of community beneficiaries of the project, the number of mother and child couple who have access to PMTCT services and to include the surveillance and investigation of maternal and neonatal death at community level.



Training TBAs on how to use child delivery kits



Supervision of health facility focal points by field supervisor



Supervision of field team by a central level staff

3. RAMAC PROJECT

Majority of chronic diseases are asymptomatic and many cases are detected when there are complications. Screening campaigns are usually organised but has not yet been proven to improve significantly the access to screening of chronic diseases like Diabetes, blood pressure and cancers. RAMAC (Riposte Africaine aux Maladies Chronique) project is proposed to assess the feasibility of implementing health facility based surveillance of chronic diseases. The starting point is Mogode health district in which we conducted an assessment on needed resources and drugs for Diabetes, high blood pressure and obesity. We assessed in all the 14 health facilities of the District of Mogode, the availability of drugs and equipment and communicated the results to health authorities. The first two (02) health facilities including Mogode District Hospital and SIR health center have been selected to start the implementation of the project. In these health facilities, two supervised health personnel have been selected, trained and supplied with needed equipment to screen all patients aged 35 and above on the up-mentioned chronic diseases. RAMAC project is sponsored and funded by M.A. SANTE; The implementation of field activities started in December 2018.



Training of surveillance focal points on screening methods



Provision of health facility with necessary equipment and supplies.

In 2019, we are planning to start the hospital based surveillance of diabetes, high blood pressure and obesity. Supervision of surveillance focal points

4. OCV MOGODE

An immunization campaign using Oral Cholera vaccine was organized in Mogode Health district (Far-North region of Cameroon) in May and June 2017 targeting a population of 126619 people. M.A. SANTE was in charge of conducting pre, in and post monitoring and evaluation of campaign activities, and the impact of the campaign through the surveillance of cholera suspected cases. A health facility based surveillance of cholera was implemented in all the 14 health facilities of the health district with the detection, reporting and investigation of all suspected cases from June 2017 to June 2018.



Monitoring of vaccination team

- Out of 17417 consultations, 1163 cases of diarrhea were reported. Among these cases of diarrhea, 18 were suspected for cholera. These cases were reported to the health system (health district) and were all confirmed negative after samples were tested with the dipstick.

M.A. SANTE detected the maximum number of diarrheal cases. The detection, reporting and investigation was high no case of cholera was confirmed favoring therefore the campaign coverage (80%).



Household collection of data with smartphone

C. PROMOTION OF ACCESS TO RESEARCH RESULTS AND RESEARCH PARTICIPANT PROTECTION

Here three main activities were conducted: organization of a research conference (CaHReF), development of a collaborative project with the MoH (BREEDSAFCA), and organization of results dissemination seminars.

1. CaHReF PROJECT

Research results are needed to guide decision making and interventions. In Cameroon, many research projects are conducted but results are not accessible to decision makers and local scientists because of limited research dissemination opportunities. Cameroon Health Research Forum (CaHReF) is an initiative of M.A. SANTE implemented in partnership with the Cameroon Ministry of Public Health and other local research health and training institutions. This conference has as objective to organize a biannual conference to share and discuss research results conducted on the Cameroon health problems with scientists, health personnel, and health authorities from Cameroon and abroad. The CaHReF 2018 edition (second edition) was organized under the sponsorship of the Cameroon Ministry of Public Health under the theme “**Data Sources for a Better Access to Health Care**” The year 2018 was focused on the preparatory activities of the conference that included:

- Communicating for abstract submission, participant registration, and mobilization of funds;
- Organizing peer reviewed abstract evaluation;
- Developing the conference tools (abstract book, agenda) and mobilizing local partners and resources
- Planning, monitoring and coordinating conference activities;
- Identifying and mobilizing key speakers, moderators, and session reporters.

CaHReF 2018 is planned to be held from January 8-11, 2019 at the Yaoundé conference center

By the end of the preparatory period, 320 abstracts were submitted and 260 were selected for presentation at different conference sessions. Also, 04 panels of scientists were invited to present;

04 plenary sessions were planned to discuss key themes of the conference with the participation of experts. Five (05) training sessions were planned to encourage the share of experience among health practitioners and researchers.

2. BREEDSAFCA PROJECT

Health research is essential for the generation of evidence to improve access to care. Research has to be conducted in accordance to international and national ethical standards and regulations. In Cameroon, available regulations are limited in covering various ethical issues associated with research implementation. BREEDSAFCA (Strengthening the Regulatory framework to upgrade the ethical Evaluation of clinical trials and Drugs Safety in Cameroon) is a collaborative project involving 02 departments of the Cameroon Ministry of Public Health (Division of Health Operations research and the Department of drug, pharmacy and laboratory), the Cameroon National ethics committee for research in human health and M.A. SANTE with the objective to strengthen the regulatory framework for better ethical and administrative evaluation of clinical research and monitoring of marketed drug safety and is funded by EDCTP (European and Developing Countries Clinical Trials Partnership). Activities of the project during the year 2018 focused on planning and mobilizing resources for the implementation of the project which is plan to start in 2019. The role of M.A. SANTE in the project is to conduct the training and intervention needs assessment among members of ethics committees, researchers and health programs personnel, regarding research participant protection and pharmacovigilance.

3. RESEARCH RESULTS DISSEMINATION

We ensured results dissemination through peer reviewed publications, organization of results sharing workshop with health authorities and participation in conferences.

a) Peer-reviewed Publications:

- Edietah, EE, Njotang PN, Ajong AB, Essi MJ, Yakum MN, Mbu ER. Contraceptive use and determinants of unmet need for family planning; a cross sectional survey in the North West Region, Cameroon. BMC Women's Health (2018) 18:171. <https://doi.org/10.1186/s12905-018-0660-7>
- Ajong AB, Njotang PN, Kenfack B, Essi MJ, Yakum MN, Iballa FBS, et al. (2018) Contraceptive method mix and preference: A focus on long acting reversible contraception in Urban Cameroon. PLoS ONE 13(8): e0202967. <https://doi.org/10.1371/journal.pone.0202967>
- Ajong AB, Njotang PN, Nghoniji NE, Essi MJ, Yakum MN, Agbor VN, Kenfack B. Quantification and determinants of HIV-related stigma among patients accessing

antiretroviral therapy in the Bamenda Regional Hospital, North West Region of Cameroon. *Globalization and Health* (2018) 14:56. <https://doi.org/10.1186/s12992-018-0374-5>

- Awolu MM, ATEUDJIEU J, Joel BE, Yakum NM, Manuella CD, Claude DH, et al. Training Needs Assessment of Health Personnel On The Management Of Diabetes Mellitus In The West Region Of Cameroon. 2018;2(3):6.
- Ateudjieu J, Awolu MM, Yakum NM, Joel BE, Thomas A, Watcho P, et al. Assessing The Availability And Readiness Of Diabetes Healthcare Service In The West Region Of Cameroon. 2018;2(2):6.
- Tembei AM, Kengne-Ouafo JA, Ngoh EA, Bonekeh J, Nji TM, Kebede D, Enyong P, Nkuo-Akenji T, Davey G, Wanji S. A Comparative Analysis of Economic Cost of Podoconiosis and Leprosy on Affected Households in the North West Region of Cameroon. *American Journal of Tropical Medicine and Hygiene* 2018, 98(4), pp.1075-1081.
- Wanji S, Kengne-Ouafo JA, Kebede D, Tembei AM, Njouendou AJ, Tayong DB, Sofeu-Feugaing DD, Datchoua-Poutcheu FR, Longang-Tchounkeu YF, Enyong PA, Newport MJ, and Davey G. Study of Lymphoedema of Non-Filarial Origin in the North West Region of Cameroon: Spatial Distribution, Profiling of Cases and Socio-economic Aspects of Podoconiosis. *International Health*, ihy028, <https://doi.org/10.1093/inthealth/ihy028>.
- Ateudjieu J, Beyala LB, Guenou E, Chebe AN, Azike BC, Goura AP, Bissecck A-CZ-K. Profile and antibiotic susceptibility pattern of bacterial pathogens associated with diarrhea in patients presenting at the Kousseri Regional Hospital Annex, Far North, Cameroon. *Pan Afr Med J* 2018 23;29:170.

b) Abstracts presented in conferences

- Health facility preparedness for cholera outbreak response in Cameroon. International forum on the management of emergencies and public health events: 19-20, September 2018. Hilton Hotel Yaounde.
- Accès à l'eau, hygiène et assainissement dans les lieux publics : cas des districts de santé de Deido, Nylon, Kousseri et Mada. International forum on the management of emergencies and public health events: 19-20 September, 2018, Hilton Hotel Yaounde.
- Epidemiology and Ecology of *Vibrio Cholerae* in Africa-Cameroon: Project's Progress report. Results sharing seminar on OCV campaign in Mogode and Cholera surveillance, 25 May, 2018, Djeuga Hotel Yaounde.



c) Organization and result dissemination sessions

In May 2018, 1 results dissemination workshop was organized at Djeunga Palace where the results of monitoring and evaluation of OCV in Mogode and E2CHOLA project were shared with health authorities and partners working on cholera in Cameroon. The following project result dissemination presentations were made in 2018



D. CAPACITY BUILDING

In this Chapter, M.A. SANTE propose each year, academic and/or professional internships to 1-6 students with as objective to capacitate interns either by supporting them in the process of developing their practical skills preparing them for job opportunities or for research or for career development. For the year 2018, three (03) newly graduated students were offered opportunities to develop their skills on monitoring health activities, laboratory activities, developing mobile phone data collection tools, planning, implementation and reporting of research interventions, training projects, and results dissemination. They developed their competence by participating in project at field, community and office level. Of these 03 interns, one (01) is still on internship, 02 finished their internships of which 01 recruited and the other is still seeking an employment.

CONCLUSION

During the year 2018, different objectives of M.A. SANTE's mission were covered satisfactorily even though resources were limited to put in place a number of planned projects. For the year 2019, there is a plan of mobilizing resources for at least 5 new projects as planned in the protocol including at least 03 research and 02 intervention, starting the preparation of CaHReF 2020 and result dissemination; offering 03 professional internships to new graduate; manuscript drafting and data analysis; extending the National and international collaboration to new partners working with the same aims.