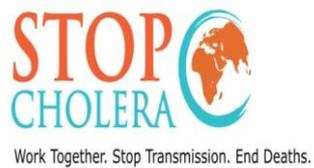


**“Second Restitution Seminar of the Project “Sustainable Cholera Surveillance for  
Cameroon”**

**Venue: ANRS Conference Hall-Yaoundé Central Hospital**

**December 04, 2014.**





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## Summary

As previewed in the research plan, the progress report of the research study “sustainable cholera surveillance for Cameroon” was presented on December 4,2014 at Yaoundé Central Hospital, with collaboration of the Division of Health Operations Research of the Cameroon Ministry of Public Health and M.A. SANTE (Meilleur Accès aux Soins de Santé), a Cameroon based NGO in charge of the implementation of this project.

The objective was to discuss the results of the first 12 months of implementation of the project and to draw lessons which could help to improve the response against the cholera epidemic that started in the Far North Cameroon since April 2014. In total, 30 persons took part in this seminar, these included head or representatives of the following: The secretary General of Ministry of Health, Division of health Operations Research of the ministry of health, Department of Disease Control of the Ministry of Health, M.A SANTE, Littoral regional delegation of Public Health, Department of health promotion of the ministry of Health, University of Dschang, Directorate of family health of the ministry of health, national institute for research on HIV/AIDs and directorate in charge of health care organization and health technology. A total of 9 power point presentations were made each followed by a discussion session. Main recommendations included: the department of disease control should take necessary measure to organize a vaccination campaign in the MADA health district; and to present the results of the study entitled “**The status of health facilities preparedness for cholera outbreak in Far North region of Cameroon; August 2014**” in the present of the Ministry of Health



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## Introduction

Sub-Saharan Africa has the highest cholera mortality burden, yet there have been few prospective studies of the disease epidemiology, seasonality, and evaluation of effective interventions in this region. Most frequently, cholera outbreaks in Africa are viewed as unanticipated events, and health officials could only deal with these outbreaks in a reactive manner. Better surveillance methods and analytical tools, preventive measures, improved case management, and vaccine delivery are interventions that can contribute in reducing transmission and mortality of cholera. The World Health Organization now recommends oral cholera vaccine for endemic countries and for other areas at risk. Implementation of these new WHO recommendations will, however, require methods to understand cholera patterns in Africa.

A research project entitled “Sustainable Cholera Surveillance for Cameroon” is being conducted in Cameroon with the joint collaboration of the Cameroon Ministry of Health and Johns Hopkins University (Department of International Health and the Global Water Program). The project is ongoing in two health regions of Cameroon; the Far North and the Littoral regions under the consultancy of a Cameroon based NGO M.A. SANTE. This project is supervised and guided jointly by the P.I. at Johns Hopkins, Professor David Sack, and the PI in Cameroon, Dr. Jérôme Ateudjieu. The implementation of this proposal is ongoing since September 2013 for the Far North region and august 2014 for the Littoral region. It includes adaptation of surveillance methodology appropriate for resource limited countries, utilizing a dip stick test, in combination with a systematic sampling system; thus, providing data on rates of disease and assessment of seasonality and risk factors. These epidemiological methods are combined with environmental water surveillance using new methods recently adapted to the dip stick. In addition, the study characterizes isolates using molecular methods to match environmental with clinical strains.



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Restitution seminar for the project is planned to take place every six months to present the progress in achieving the objectives and milestones to the Cameroon Ministry of Health and to key actors involved in Cholera control in Cameroon. The first seminar was organized early this year on March 18, 2014 and the next one was planned to be held on March 18, 2015. The recent Cholera epidemic outbreaks that started since April 2014, with more than 3346 cases and 183 deaths recorded raised a lot of concerns and worries. As such, the Secretary General of the Ministry of Health requested an accelerated restitution seminar of the project as a step to identify key factors responsible and intervention needs to control the current and prepare for future outbreaks. For this reason, the second restitution seminar of the project “Sustainable Cholera Surveillance for Cameroon” was held on December 04, 2014 at the ANRS conference hall of the Yaoundé Central hospital. It was organized by the Division of Health Operations Research (DROS) of the Ministry of Health, in Collaboration with Meilleur Accès aux Soins de Santé (M.A SANTE), Johns Hopkins University (JHU) and STOP Cholera.

### **Participants**

The seminar was attended by a total of 30 participants including the secretary General at Ministry of Health and representatives of the following organs:, Division of health Operations Research of the ministry of health, Department of Disease Control of the Ministry of Health, M.A SANTE, Littoral regional delegation of Public Health, Department of health promotion of the ministry of Health, University of Dschang, Directorate of family health of the ministry of health, national institute for research on HIV/AIDs and directorate in charge of health care organization and health technology. The attendance list is attached.

### **Objective**

The objective of the seminar was to share the overall progress in achieving the goals and milestones of the project with the Ministry of Health and to key actors involved in Cholera



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control in Cameroon, as a starting point in identifying specific intervention needs to effectively control cholera in the Far North region of Cameroon.

## Methodology

In the course of the seminar, the methods used were oral presentations on PowerPoint followed by questions, discussions, propositions, and recommendations. The seminar started at 9 AM with arrival and registration of participants, followed by a welcome speech from the director of DROS. There was also a word from the secretary general of the Ministry of Public Health. Events of the seminar went on strictly as planned in the agenda attached. Table below summarizes the main questions that were raised and the recommendations that were taken for each presentation.

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Presentation	presenter	Key points high-lighted	Question Raised	Recommendations
Sustainable cholera surveillance for Cameroon : key results of the first year implementation	Dr Ateudjieu Jerome MD, MPH, Clinical Research Unit, Division of Health Operations Research, Ministry of Public Health, Project coordinator at M.A.SANTE	- By October, 1425 cases had been recruited and 488 control subjects.  -The epidemic touched 2 study sites of the project (Darak and Blangoua) and 180 cases were recorded with 7 deaths.  - The project investigated 72 suspected cases of cholera and 59 were confirmed.  -1013 environmental samples were collected from 42 sites; 242(24%) presented aspects of vibro cholera and 1 was positive for vibro	What is expected from Environmental cholera surveillance in the outbreaks during investigations process?  -What are lessons learned from available results of the project  -How to respond to an outbreak when patients make displacements between	- Include environmental surveillance during outbreak investigations .  -Telephones and TV are available in almost all household and should be considered as best communications channels for health related messages.  -Enable inter-country communication by organizing a seminar involving

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		cholerae o1(the well was closed later by health authorities when they were informed)	neighbouring countries, health districts or health regions?  -Can the results of the study be inferred in the whole lake Chad area?	neighboring countries.  Organize a restitution seminar to share these results with districts and regions involved.  -Do surveillance for considerable long period of time in order to clearly identify risk factors.
The status of health facilities preparedness for cholera outbreak in Far North region of Cameroon; August	Miss NOUETCHOIGNOU Julienne stéphanie  MPH-Epidemiology, Research Assistant and Monitor at M.A.SANTE	-Less than half of health facilities included cholera control in their action plans and 1/5 of those who planned budgeted for it-  Guidelines for case management was not present in about 2/3 of the health	What is the right time for this assessment in the region?  What are	- Present results of this study in the presence of the Minister.  -Conduct this study in the Littoral region (Douala), the

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2014		<p>facilities-16% of the health facilities did not have a nurse and about 70% of them had not received any supervision on cholera control and epidemic response since the beginning of 2014</p> <p>-Principal medicaments for the management of case that is: SRO, ringer, catheter and doxycycline were not present in 40%, 50% 38% and 38% of the health facilities respectively.</p> <p>-A water source was not present in 20% of health facilities. And about 18% of them did not have a toilet</p>	<p>characteristics of health facilities in which this assessment should be conducted?</p> <p>Can recommendations be generalized in the region</p>	<p>second region affected by cholera outbreaks.</p>
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<p>Contributions of the DOVE project in responding to the current cholera outbreak in the Far North.</p>	<p>Dr Ateudjieu Jerome, MD, MPH, Clinical Research Unit, Division of Health Operations Research, Ministry of Public Health, Project coordinator at M.A.SANTE</p>	<p>-A training workshop was organized in Maroua from 20 – 24 august 2014 to improve on preparedness and response to cholera outbreak.Three field visits were made to affected areas. Firstly in Bourrha; secondly in Bourrha, mogode and Hina; and the thirdly in Darak of the Mada health district. During these visits, personnel were train on cholera epidemic surveillance and how to use dipstick; they were further supplied with dipsticks rapid tests, ORS and stool bottles. Clinical and environmental Samples were also collected and tested-</p> <p>The results of clinical and environmental sample testing</p>		
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		permitted us to identify a contaminated well in Darak and was immediately transmitted to the health authorities and the well was closed.		
Therapeutic itinerary of patients with diarrhea in the Cameroon Lack Chad area	Mr. Yakum Martin, MPH- Epidemiology, in charge of Follow-up of activities and supplies at M.A.SANTE	-40% of diarrheal patients had taken a treatment at home before visiting a health facility, -Delay at home and living more than 5km away from the health facility contributed to aggravate the situation of the patient upon reception in the health facility.	What are main barriers to health care demand for patients with diarrhea?  -Do the people in the community know the importance of rapid take of ORS in cases of	-Conduct a qualitative study to identify barriers to health care access.  Identify strategies to make ORS readily available in the community.  -Sensitize populations on rapid take of ORS at the level

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			diarrhea?  Is ORS accessible in the community?  Can the study provide answers why people refuse to take ORS in certain communities of the Far North region?	of the community.
Access to water and sanitation of patients with diarrhea in the Cameroon Lack Chad area	Mr. EBILE Walter MPH- Epidemiology, Data Manager at M.A.SANTE	2/5 of the patients were using a potentially contaminated water source and only 1% reported that they treat water before use.  1/5 of the patients did not have a toilet, 20% affirmed that they wash	Can this study be inferred to the four health districts of the study?  Can recommendations be	-Conduct qualitative study to know why there is poor practice of WASH.

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		their hands after using the toilet and only 30% wash their hands while cooking meals.	implemented without community participation	
Risk factors for diarrhea Cameroon Lack Chad area	Mr. Djouma Nembot Fabrice, MPH-Epidemiology, Department of Biomedical sciences, University of Dschang	-About 77% of deaths due to cholera-like syndrome happens in the community, -When compared with health facility base treatment, Home based treatment during cholera by auto medication increases the risk of death 16 times while treatment at the community centre doubles this risk.	-Are treatment kits available in the community?  What was the difference between community treatment centers and health facility in terms of cholera treatment?  What were reasons	Conduct a qualitative study to identify barriers to health care access.

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			explaining cholera deaths in health facilities?	
Cholera preparedness from central to district level: when and how should the immunization be part of	Dr Ateidjieu Jerome, MD, MPH, Clinical Research Unit, Division of Health Operations Research, Ministry of Public Health, Project coordinator at M.A.SANTE	<p>-it is not possible to predict cholera outbreaks</p> <p>-Neighboring regions and districts to an area in epidemic or that has history of cholera epidemic must start preparedness to reduce the mortality and morbidity Associated.</p> <p>-Preparedness should be done at all levels of the health system. It should include the following in the action plan: epidemiological surveillance, training supervision and motivation of personnel, sensitization of the population, purchase and prepositioning of consumables and</p>	<p>How to mobilize resources from partners and decision makers when there is no outbreak?</p> <p>When drafting the action plan, how to estimate expected cases of cholera</p> <p>How to improve the coordination of key actors involved in the fight against cholera?</p>	<p>The ministry should call for a preparatory meeting of actors involved when drafting the long term and annual action plan of cholera.</p> <p>The department of disease control should write present a note to the MOH to defend why an immunization campaign against cholera should be organized in Darak</p>

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		medicaments  -In area with insecurity and limited access to care, this preparedness should be accompanied with a request to organize a vaccination campaign against cholera		
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## Conclusion and key recommendations

The seminar was successful in terms of organization and attainment of its objectives. Events all went on as planned in the agenda. The seminar ended with a closing remark from the director of the Division of health operations research and there was Lunch.

### Recommendations

The following recommendations were made after presentation and discussion:

1. To present the results of the study entitled **“The status of health facilities preparedness for cholera outbreak in Far North region of Cameroon; August 2014”** in the present of the Ministry of Health.
2. Due to the limited access to cholera cases in the MADA health district, the department of disease control should take necessary measure to organize a vaccination campaign in the MADA health district; Technical assistance of the DOVE team and EPI may be solicited.
3. The project should insert as one of its objectives to evaluate efficiency of community base epidemiological surveillance of cholera and diarrhea.
4. The project should conduct a qualitative study to understand the behavior of communities with regard to the therapeutic itineraries during diarrheal episodes, utilization of water and hygiene methods.
5. To harmonize sources of data of epidemiological surveillance of cholera
6. To train the personnel of health regions in the analysis of the data of epidemiological surveillance (the DOVE project can do this).
7. At the end of the project, the results should be presented to all actors involved in the fight against cholera and diarrheal diseases, promotion of access to potable water, to health authorities, communal and cross-border authorities of the zone of research.
8. Telephone and television were identified as the major communication pathway to reach the highest number of population in the study zone



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## Attachments

- Agenda of the seminar
- Attendance list