



Makerere University One Health Student Innovation Club One Health Central and Eastern Africa (OHCEA)

**Rabies Vaccination and Awareness Outreach Held On 28th, 29th And 30th
September 2017 in Kanyanya, Kabowa and Kawaala:
A One Health Approach**

**UG 2.2.1; Building skills in risk communication and public health
interventions through experiential learning and community engagements**

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Executive Summary

A total of 115 pets were vaccinated against canine rabies during an outreach carried out by the multidisciplinary Makerere University Students One Health and Innovation Club. The pets owners were from Kawaala (30 homes), Kabowa (15 homes) and Kanyanya (15 homes). Prior to the vaccination outreach, doses of canine vaccine were obtained from Ministry of Agriculture Animal Industry and Fisheries through Uganda Veterinary Association. In partnership with the Veterinary Office in KCCA and the District Veterinary Office as well as the area LC's it was possible to access the community. There were a total of 72 students who participated in the community outreach: from College of Health Sciences (8), College of Veterinary Medicine, Animal Resources and Biosecurity (16), College of Engineering, Design, Art and Technology (2), College of Agricultural and Environment Sciences (2), College of Humanities and Social Sciences (9) and School of Laws (5). Each student had a role and competence from their discipline to bring onboard to the team.

1.0 Introduction and Background to the Community Engagement.

Rabies is a fatal viral zoonotic disease occurring in Uganda¹. It is one of the national prioritized zoonotic diseases in 2017 and is of public health concern in the urban areas like Kampala where dogs and cats are kept as pets. The dog and cat are however, very useful in the household because of their companionship and role as well as the fact that they guard the house against intruders and keep rodents and snakes at bay. Vaccination of household pets against rabies as one of the prevention measures to reduce the occurrence of canine rabies².

The Students One Health and Innovation Club in Makerere University, initiated in 2014, promotes One Health approaches within and outside the university. Multidisciplinary groups of students have been involved in creating awareness on infectious diseases in nearby communities and participating in public health interventions. The community engagements and experiential learning build students' skills in one health and students appreciate the roles and responsibilities of different disciplines and sectors in health. The students also bring on board competencies from their majors areas of specialization

In November 2016, a team of six students from the School of Public Health, College of Health Sciences and College of Veterinary Medicine Animal Resources and Biosecurity who are members of the Makerere University One Health Students Club, carried out a sensitization seminar on rabies in St Noa's Girls Senior Secondary School in Wakiso District, about 15km from the Makerere University in commemoration of the One Health day. Building on this success, of this previous event, the One Health students club in 2017 decided to continue the sensitization. On this occasion, it was to be done as a community outreach, as a door-to-door exercise, with vaccination of household pets coupled with sensitization on the dangers of rabies. A common vaccine points was to be maintained in case some members of the community preferred the latter.

2.0 Preparations for the Rabies Vaccination and Sensitization outreach:

4th September 2017, club members met to select an event that most members could participate in. Rabies sensitization was selected over essay writing completions. Seven student leaders were to oversee the implantation of the outreach and the subsequent reporting together with the Faculty Lead in-charge of the Health Clubs

The objectives of the outreach would be for:

- A multidisciplinary team of Makerere University students to participate in vaccination of dogs and cats against Rabies disease.
- A multidisciplinary team of Makerere University students to participate in community sensitization and awareness on Rabies and its impacts.

¹World Health, O. WHO Expert Consultation on Rabies. Second report. World Health Organ Tech Rep Ser. 2013;982:1-139. Back cover

²Anthony R Fooks, Ashley C Banyard, Daniel L Horton, Nicholas Johnson, Lorraine M McElhinney, Alan C Jackson, Current status of rabies and prospects for elimination, In The Lancet, Volume 384, Issue 9951, 2014, Pages 1389-1399

Detailed plans were made on how the event would be executed:

Activity/ Task	To Act
Contacting the Students Administration in COVAB for permission to carry out the event	<ul style="list-style-type: none"> - Dean School of Veterinary Medicine, Animal Resources and Biosecurity (who also oversees activities of OHCEA) granted permission and provided a introductory letter for students - OHCEA Country Office granted permission and gave limited support for transport and refreshments
Accessing doses of vaccine for canine rabies and maintenance of the cold chain	<p>Lobbying with Uganda Veterinary Association (UVA) support for the event and a pledge for doses of canine vaccines. The SONIC Club President (a student of veterinary medicine) attended a UVA meeting on 25th September 2017, during which they were pledged some canine vaccines doses form Ministry of Agriculture Animal Industry and Fisheries (MAAIF).</p> <p>The vaccines were to be collected form the cold chain store at the MAAIF offices in Wandegaya each morning and the balance of un-used doses returned.</p> <p>COVAB provided a cool box with ice briquettes to store the vaccine</p>
Setting the Day and Date for the Community Engagement	Owing to the fact the main purpose of the doses of vaccine were for the World Rabies Day, the event for the students had to be brought forwards from the 3 rd October to the period around 28 th of September 2017.
Contacting the Veterinary Department of Kampala City Council for permission and support	<ul style="list-style-type: none"> - The UVA sought for permission from the District Veterinary Officer (DVO), Dr. Emilian Ahimbisibwe for the students to carry out the vaccination campaign which was granted. - The DVO contacted the local government veterinary officer Dr Nabaasa Robinson to be available to support the event. - The DVO issued rabies vaccination certificates that were to be completed upon administration of each dose of canine rabies vaccine. - The community outreach team has to submit a list of households where the vaccination took place
Sourcing a Veterinary Clinical to oversee and lead the vaccination activity	<ul style="list-style-type: none"> - A clinician from COVAB who was also a One Health Champion (Dr. Gabriel Tumwine) agreed oversee the campaign. - He was to be assisted by a former SONIC Club President (2016) – Dr. Paul Ssuna a private practicing veterinarian
Contacting the Local Village Council Leaders (LC1) in Kawaala, Kyanja and Kabowa for permission to vaccinate dogs in their area	<ul style="list-style-type: none"> - The Kampala District Local Government veterinarian together with the students worked with the community leaders to obtain permission for the event to occur in the community. - The latter subsequently identified a common point the vaccination station would be set up - Agreed to disseminate information to the community on the upcoming rabies vaccination campaign.
Preparation of Sensitization materials	<p>Basic Information on Charts used in sensitization</p> <ul style="list-style-type: none"> - The no-cost nature of the out reach - Animal species Affected - How it spread from dog-to-dog and other animals - How the disease gets to human being - Clinical signs of rabies in dogs and human beings - Prevention by vaccination of canine and feline - Person bitten by dog to report to hospital immediately for Post Rabies exposure treatment.

3.0 Profile of Students Who Participated In The Outreach and their Roles

Multidisciplinary inclusiveness was put in high regard, as many disciplines were involved. In summary there were a total of 72 students participated, with an average of 40 per day. The female 16 in number (22.2%) while 56 (77.7%) were male. Seven colleges or schools were involved; 44 students from COVAB with 39 students of Veterinary Medicine and 5 students of B. Biomedical Laboratory Technology; 10 students from MakSPH, (8 of Environmental health and 2 of Public Health), 3 students from Social Science, 7 students from Civil engineering, 4 students from Agriculture, 2 students from School of Law and 2 students from COBAMS.

Table 1 Profile of students who participated per College and their leadership role is illustrated

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Table 2 continued...

Legend

^{1abcd} Makerere University Students One Health and Innovations Club Leadership

^aClub Finance Secretary

^bClub Vice President

^cClub President

^dClub Project Coordinator

The double line (____) Club focal persons or mobilizers in the various colleges in Makerere University

Sch Law	School of Law, Makerere University
CAES	College of Agriculture and Environmental Science
CEDAT	College of Engineering, Design, Art and Technology
CHUSS	College of Humanities and Social Science
COBAMS	College of Business and Managerial Science
COVAB	College of Veterinary Medicine, Animal Resources and Biosecurity
MakSPH	School of Public Health, Makerere University

4.0 Summary of The Implementation Of The Community Outreach:

4.1 Outreach Activities Carried Out

A total of about 40 students participated with 40 students going out each day. While in the field, the students were divided into two groups each consisting of 20 students. One of the groups pitched camp at a common vaccination point station selected by the community (Table 2). The other group was mobile and moved door to door with the local community leader to bring the service to the households who found it difficult to leave their homes or move with their pets. This was also to enable the households who got to know within the short notice to participate.

The veterinary medicine students in 4th year and 5th years did the vaccinations on the dogs and cats under the supervision of Dr. Paul Ssuna and Dr. Gabriel Tumwine.

Students offering, Public health and Environmental health science and Social sciences participated in the sensitization exercise. The students from Law were to examine the any legal by laws surrounding the vaccination.

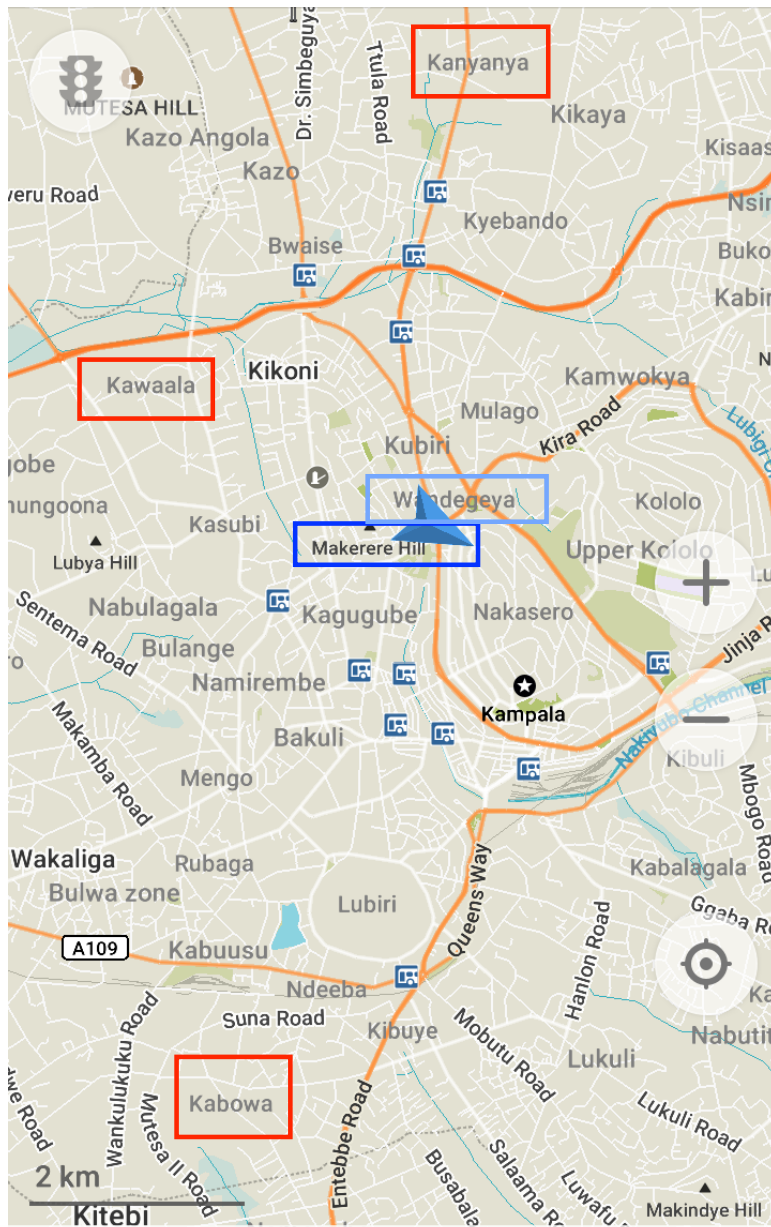
The lists of pets owners who participated in the vaccination were submitted to the Local Government Veterinary Office.

Table 2: A summary of the community outreach: (villages visited, Vaccination Points, Number of households visited and pets vaccinated

Date	Village	Distance from Makerere University	Common Vaccination Point	Duration of Outreach	No. of Homes visited	No. of Pets vaccinated
28 th Sept	Kanyanya	5.3 km	local football pitch behind, IFTRAC (fish processing industry)	11:00am to 6:00pm	15	50
29 th Sept	Kabowa	7 km	St Kizito church grounds	10:15 am to 6:00pm	15	40
30 th Sept	Kawaala	3.6 km	outside Kawaala Health Center III	8:00am to 3:00pm	30	25

4.2 Support from OHCEA

We received transport in form a vehicle, daily refreshments meals, gloves, disinfectant and soap from the OHCEA Country Office. The office also facilitated the LC's to mobilize the community



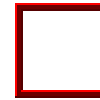
Legend:



Location of Makerere University from where the team departed from daily



Location of Wandegaya from where the team obtained the vaccine doses daily



Location of the Communities where vaccination and sensitization outreach took place

Figure 1 Map depicting the location of the communities where intervention took place

4.2 Pictorial of the Community Outreach for Rabies Vaccination and Sensitization



Pictorial 1: Group Photo of the Multidisciplinary Students' Team with Dr. Ssuna Paul in the Center at St. Kizito Church Vaccination Point in Kabowa, Rubaga Division (The red arrow is pointing towards the cooling box)



P 2A Kanyanya Vaccination Point in an open field outside the Fish Factory



P 2B Kabowa Vaccination Point outside St Kizito Church



P 2C Kabowa Vaccination Point outside St Kizito Church

Pictorial 2 Action Points during the administration of the Canine Rabies Vaccine



P3A: Rabies Vaccination Point outside Kawaala Health Center III
 A young pet owner talks to the students as his dog receives a vaccine dose in the inset
 The two red arrows point towards the information charts used by the outreach team



P3B: Students in action



Pictorial 3 Action Points during the administration of the Canine Rabies Vaccine...



P 4A: Students locate homes in Kanyanya



P 4B: Students locate homes in Kawaala

Pictorial 4: Home Visits for Rabies Vaccination



P 4C: Home visit in Kanyanya



P 4C: Home visit in Kabowa



P4D: Home visit in Kanyanya

5.0 Gender considerations and Questions brought out by Community

a) Kanyanya

- Many locals believed that killing of stray dogs was the only way to address rabies prevalence in their area.
- Some local showed lack of trust and resistance to the rabies vaccinations citing “Dog killings by KCCA disguised as vaccinations.” They argued that the dogs offered protection in their area marred by petty crime.

b) Kabowa

- Locals expressed dissatisfaction with KCCA as they alleged that KCCA kills their dogs and were therefore reluctant to participate in the rabies vaccination campaign.

c) Kawaala

- The locals loved the exercise and credited the club for its initiative.
- A few of the locals also believed that euthanasia of the stray dogs and cats would be helpful in safe guarding themselves from dog bites.

Recommendations

- Better sensitization of the masses about Rabies by the Veterinary and Public Health Office in Ministry of Agriculture Animal Industry and Fisheries and Ministry of Health

6.0 Questions Registered by the Community and Answers given

- Question:* Can rabies disease affect cows? *Answer:* Yes if it is bitten by a rabid dog
- Question:* Is barking seen in human beings the first sign of rabies? *Answer:* Elaborated different forms of disease of which barking is one of the last stages
- Question:* Does Rabies kill? *Answer:* Yes, if not treatment is not received early.
- Question:* Is it possible for the rabies vaccine in humans given at birth or early enough in life alongside with other vaccines like BCG, measles, polio etc.? *Answer:* Rabies in human beings can be easily controlled by vaccinating dogs
- Question:* Why are stray dogs not killed/ (removed from circulation) – No straight answer
- Question:* Is it possible for somebody to give up dogs for adopting - *Answer:* Yes. The dogs can be taken to Uganda Society for the Protection and Care of Animals (USPCA) in Mbuya.

7.0 Learning Outcomes of the Outreach

- Team Building
- Community Engagement
- Confidence in speaking in the community
- Importance and roles of different disciplines on the team

- The Students from College of Engineering Design Art and Technology got inspired on how to build suitable kennels for the pets
- Importance and roles of all the stakeholders involved in planning : Community, Local leaders, Ministry etc.
- Building partnerships with Uganda Veterinary Association, Kampala Local Government Veterinary Office and LC

8.0 Conclusion

Students' participants of the one health club Makerere were exposed to a real life one health challenge. The activity exposed the student participants to field work since students spend most of their time in classrooms.

Students learnt from the qualified personnel how to vaccinate. Students learnt firsthand how to interview and probe locals for information the activity was a success. We would love to extend our thanks to our dear patrons, and OHCEA.

It is hoped that the Makerere University Student One Health and Innovations Club will be given space to display a poster on this work at the International One Health Day Celebrations organized by the National One Health Platform on the 3rd November 2017.