



Biribawa Claire

MPH, BSC in Human Nutrition and Dietetics, Field Epidemiology Fellow (UPHFP)
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Host Site: Trauma Injury and Disability Program (TRIAD)

Host Mentors: Dr Olive Kobusingye, Mr. John Kissa

Academic Mentor: Dr. Joan Mutyoba, MakSPH

ABOUT THE FELLOW

I have conceptualized, designed and implemented injury research projects like Epidemiology of Road Traffic Injuries in Kampala, Uganda. I have also written a grant as Principal Investigator and succeeded in getting funding for the research project. These have built my competence in designing research protocols and implementing them. I underwent the Global road safety leadership course which further equipped me with skills and knowledge to tackle road traffic injury problems.

I have been able to lead two outbreak investigations and participate in six more outbreak investigations. I have undertaken a number of short courses and improved my skills data analysis using statistical and spatial packages like STATA, SPSS, EPI Info and QGIS; conducting a TB operational research; rapid health assessment in complex emergencies; and Estimation of Burden of disease.

Achievements at the host site

1. Produced a maiden Newsletter on Road Traffic Injuries
2. The fellow drafted and completed data extraction protocols for a pedestrian safety project at the host institution, Trauma Injury and Disability Program
3. The fellow was part of a writing group on a concept of Emergency Medical Services; Improving of Human capacity in the service delivery in Kampala, which was later implemented.
4. Trained Traffic Officers and other road safety stakeholders in risk factors and interventions for road safety and Vulnerable road Users
5. The fellow was part of a writing group on a grant proposal on Strengthening Emergency Medical Services human capacity in post-crash care along roads servicing oil rich districts in Uganda. a grant that was awarded to the host site.
6. Participated in writing the protocol and proposal on a national survey of the capacity of Emergency Medical Services in Uganda (Host site).
7. The fellow facilitated a training on Violence, Weapons and Trauma in Public Health Complex Emergencies
8. Participated in the National assessment of Emergency Medical Services
9. Facilitated a training of road safety for rapidly motorizing countries on Road traffic injury risk factors and vulnerable road users

Program-specific achievements

1. The fellow has also been an editor on two issues of the Uganda National Institute of Public Health (UNIPH) bulletin.
2. Conducted analysis on data from DHIS2 to on the burden of injuries in Uganda
3. Team lead/Principal Investigator in the investigation of a measles outbreak in Lyantonde District
4. Team lead/Principal Investigator in the investigation of a Rift Valley Fever Outbreak in Buikwe District
5. Team lead on the study of epidemiology of road traffic injuries in Kampala, Uganda
6. Attended a 2 week course on Summary measures for Population health and 1 week training on Managing District Health Systems at John Hopkins University, School of Public Health, USA.
7. Participated in the following outbreaks:
 - A cholera outbreak in Nebbi District associated with drinking unsafe water from the lake
 - Mysterious Deaths Caused by Consumption of Alcohol Adulterated with High Concentrations of Methanol, Wakiso District- Uganda, June 2017
 - Tumors in Isingiro
 - Leptospirosis in Kabale
 - Participated in an acute watery diarrhoea investigation in Kyaka Refugee Camp, in Kyegegwa District, January 2018.
 - Outbreak of mumps among children in a children's home in Wakiso District, which was associated with close contact among children
8. Conducted a TB operational research study on Nutritional status and TB treatment outcomes among TB/HIV co-infected patients at Mubende Regional Referral Hospital, 2014 – 2017
9. Led a quality improvement project"Improving human capacity of lifeguards to improve water safety and response to drowning victims at recreational water sites in Kampala and Entebbe"
10. HIV study: Sexual Violence, HIV Infection and other Sexually Transmitted Diseases among Male Prisoners in Uganda
11. Conducted a study on the Incidence and Trends of Road Traffic Injuries in Kampala District, Uganda 2012 – 2016



Claire Biribawa (white top) conducting a case finding interview under Lilian Bulage's supervision (stripped dress) during a measles outbreak investigation in Lyantonde District, 2017

Conference presentations

1. Oral presentation on Incidence and Trends of Road Traffic Injuries in Kampala, 2018 at the National Field Epidemiology Conference, Kampala, 2018
2. Oral presentation on Measles Outbreak Propagated by Hospitalization at a Pediatric Ward: Lyantonde District, Uganda – August 2017 in the National Field Epidemiology Conference, Kampala, 2017
3. Oral presentation on Incidence and Trends of Road Traffic Injuries in Kampala, at the 7th Africa Field Epidemiology Network Conference, Maputo, 2018
4. Oral presentation on Measles Outbreak Propagated by Hospitalization at a Pediatric Ward: Lyantonde District, Uganda – August 2017, at the 7th Africa Field Epidemiology Network Conference, Maputo, 2018
5. Oral presentation on Incidence and Trends of Injuries due to Gender Based Violence 2012 – 2016 in Uganda, at the Joint Annual Scientific Conference (JASH Conference), 2017, Kampala Uganda

Publications and manuscripts written

1. Burden of Injuries due to Gender Based Violence in Uganda, 2012 – 2016 : Epi-bulletin article published in the National Institute of Public Health quarterly bulletin
2. Incidence and trends of Road traffic injuries in Kampala District, 2012 – 2016.; Epi-bulletin article in the National Institute of Public Health quarterly bulletin
3. Co-authored four articles in the Uganda National Institute of Public Health (UNIPH) bulletin, volume 3, Issue 4 namely:
 - Mysterious Deaths Caused by Consumption of Alcohol Adulterated with High Concentrations of Methanol, Wakiso District- Uganda, June 2017
 - Malaria morbidity following Indoor Residual Spraying in Eastern and Northern Uganda: A comparative analysis of IRS and non-IRS districts 2013-2016
 - Outbreak of Leptospirosis in Kabale and Rubanda District, March-July 2017; Uganda, March-July 2017
 - A Falsely Reported Cluster of Tumors in Isingiro District
4. Policy brief: Prevent hospital-acquired infections through vaccination of all children seeking care during measles outbreaks
5. Newspaper article in the New Vision "It has been said do not drink and drive but drunk walking is just be as lethal".
6. Manuscript on Burden of Injuries due to Gender based Violence in Uganda, 2012 – 2016: Submitted to Injury Epidemiology Journal for peer review and publishing
7. Manuscript on Measles Outbreak Propagated by Hospitalization at a Pediatric Ward: Lyantonde District, Uganda – August 2017: Under internal review
8. Manuscript on the Prevalence and Determinants of Sexual Violence among Male Prisoners in Uganda: Under internal review
9. Manuscript on Estimation of Incidence and Trends of Road Traffic Injuries in Kampala, 2012 – 2016: Under internal review

Summary of Epidemiological Study:

Title: *Estimation of Incidence and Trends of Road Traffic Injuries in Kampala District, Uganda (2012–2016)*

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Abstract

Introduction: Annually, road traffic injuries (RTIs) kill 1.3 million people and cause 20-50 million serious injuries globally. Uganda's estimated rate of RTIs is high, and 50% of these RTIs occur in Kampala District (KD). Understanding the burden of RTIs, especially in the country's capital, is crucial for effective allocation of resources and for setting up targeted effective interventions.

This study aimed to describe the burden of RTIs in KD by determining the fatal and non-fatal rates of RTIs, prevalence of RTI risk factors, and RTI trends from 2012-2016.

Methods: We conducted a retrospective descriptive analysis using Uganda Traffic Police Department surveillance data. Annualized RTI death and injury rates per 100,000 population were calculated and compared between different population segments and time periods. Type of road user and police-reported causes of road traffic crashes (RTCs) were also assessed.

Results: In 2016, RTCs resulted in 493 deaths and 2,528 injuries in KD. Males aged 25-34 years and 35-44 years had the highest rates of fatal RTIs (90.6 and 90.5 per 100,000 population, respectively). Pedestrians were the most commonly affected road users for both fatal and non-fatal RTIs (50% and 36%, respectively). Among types of vehicles involved in RTCs with at least a death or injury, motorcycles were the most common (37%). Reckless driving was the most common cause of RTCs (48%). The rate of fatal RTIs declined from 44.6 in 2012 to 31.7 in 2016 per 100,000 population.

Conclusion and Recommendations: From 2012-2016, the fatal RTI rate decreased by 29% in KD. However, the fatal RTI rate in KD is still almost twice as high as the global rate (17.4). There is a need to establish interventions to curb RTIs and reduce reckless driving. RTI prevention strategies in KD should emphasize vulnerable road users (pedestrians/motorcyclists) and young adult males, who bore the highest proportional burden of RTIs.

Key terms: Road traffic Injuries, traffic accidents, Uganda

Lessons Learned

During the fellowship, I learnt and developed the following skill sets:

- Outbreak Investigation
- Scientific writing; Manuscripts, Abstracts, Policy Briefs and Newspaper article
- Editorial skills for scientific articles
- Data analysis skills
- Designing and implementing Quality Improvement Projects
- Evaluating a surveillance system
- Presentation skills
- Writing skills
- Networking skills
- Balancing work and family

Next steps

I hope to further my career in the field of during the Public Health fellowship. I plan on publishing all the work done during the fellowship in peer review journals. Epidemiology through service in an organisation that will allow me leverage my knowledge, experiences and skills obtained.



Claire Biribawa receiving an award for 2nd runner up – Best Oral Presentation at the 7thAFENET Conference, Maputo Mozambique, 2018