**Project Title:** Saving Mothers and Babies: Launching Maternal and Child Health Education in Ugandan Villages  
**Project Location:** Jinja, Uganda  
**Nominating Institution:** University of Pennsylvania (Penn)  
**Project Lead:** Seungwon Lee, Penn '23 Neuroscience (Home country: South Korea)  
**Project Member:** Julia Gerbino, Penn '25 Design (Home country: U.S.A)

**Project Dates:** June 1st to August 10th (10 weeks)  
**Partners:** Uganda Ministry of Health, Busoga Health Forum, Jinja Regional Referral Hospital, Central Busoga Diocese, Busoga Muslim Region, Bugembe and Budondo Village Health Teams

**Background:**

Approximately 830 mothers and 6,700 newborns die from preventable causes daily, and 99% of such deaths occur in developing countries. Uganda persistently presents very high rates of maternal and neonatal mortality, exceeding five times the goal set by the Sustainable Development Goals for 2030. At large, sub-Saharan Africa presents the slowest annual rate of decline of such mortality in the world, and Uganda still contributes to one of the highest absolute numbers of maternal death in Africa.

The fundamental cause for such alarming mortality rates can be traced back to the lack of awareness and health literacy on maternal and child health topics. Such lack of awareness inhibits the expecting mothers and fathers from making the timely decision to seek skilled care, resulting in an increased risk of disease and death during pregnancy and childbirth. For example, while studies report that timely and good quality antenatal care (medical check-ups during pregnancy) can prevent a majority of childbirth-related deaths, the uptake of such health services in Uganda remains painstakingly low: only 1% of pregnant women complete all eight antenatal care visits recommended by the World Health Organization, and less than half complete at least four. This failed uptake begins with the lack of knowledge on the importance of antenatal care.

Thus, the status quo calls for immediate efforts to bolster the communities’ health literacy in maternal and child health (MCH) and equip villages with the ability to make quick, well-informed decisions and build community-wide awareness of obstetric emergencies. This initiative answers precisely that.

**Project Objectives:**

This project’s primary objective is to launch a community-based MCH education program in 53 villages of Jinja, Uganda. The project will train dozens of community health workers and religious leaders as knowledgeable advocates of MCH and offer educational resources at the village level, both at home and at religious services. The education program will emphasize the following MCH topics: 1) taking preventative measures, such as immunizations and antenatal care, 2) acknowledging danger signs and appropriate responses, and 3) raising awareness of birth preparedness to minimize delays in obstetric emergencies.

**Project Description:**

In early 2022, Seungwon founded Communities for Childbirth International (CCI) to develop unique community-based initiatives in MCH in Uganda and established an office in Jinja. In the summer of 2022, Seungwon was awarded the Hassenfeld Foundation Social Impact Grant and three others (total of $10,000) to pilot the preliminary version of this initiative in 15 villages of Jinja. The CCI team traveled to Uganda for one month and trained dozens of community health workers with CCI’s illustrative curriculum developed in partnership with local health workers for medical accuracy, social work experts for culturally appropriate content delivery, and artists to minimize language and literacy barriers. Such CCI-trained community health workers have been carrying out door-to-door education sessions since October 2022.

So far, CCI’s pilot project has enrolled approximately 50% of pregnant women (~350/700) in the 15 villages of Bugembe, a sub-county in Jinja City. Although in-depth evaluations are currently underway, the community health workers are already sending reports of notable increases in antenatal care attendance in local health centers, a significant indicator of reinforced MCH awareness and a predictor of reduced maternal mortality. Thus, this year, the team hopes to further scale up this project to a larger audience and also train religious leaders on top of community health workers as MCH advocates to enhance the accessibility of the project.

**i) Target 1: Expanding the Target Audience of the Education Program**

While the current pilot in Bugembe primarily targets pregnant women, the team hopes to scale up to also include men, as MCH is not just a ‘women’s’ health issue. In Uganda, male involvement in MCH is
critical as men are most frequently the household decision-makers that affect women’s abilities to seek hospital care. Thus, the project will renovate the curriculum to include a larger emphasis on community engagement, harmful gender-based stereotypes and cultural beliefs in MCH, and expecting fathers’ roles during prenatal, gestational, and postnatal periods. Then, the team will conduct refresher training for the partnered community health workers on the revised curriculum and educate both women and men on basic MCH knowledge and wise action plans during pregnancy and delivery.

ii) Target 2: Expanding Partnerships with More Villages

So far, we have been mainly operating in 15 villages of Bugembe, a sub-county in Jinja. However, after months of successful establishment, there are neighboring villages that expressed interest in collaborating with us. We are currently optimistically discussing partnerships with Budondo sub-county, which consists of 38 villages and 75 community health workers. We conducted preliminary research to evaluate the realistic logistics and optimistically projected the expansion as Budondo shares many similarities with Bugembe, such as similar population size.

iii) Target 3: Making the Program more Accessible by Involving Religious Leaders

Ugandans are largely religious, and they faithfully embrace their religious leaders’ words in many areas of life, including family and health issues. As a result, health-related messages from such leaders can have a far-fetching influence on the community’s health-seeking behaviors. Last summer, Seungwon led the team to sign MOUs with two religious entities to enable community members to access MCH information through their religious services: Central Busoga Diocese (Christian) and Busoga Muslim Region (Muslim) each govern 7 and 11 districts in Eastern Uganda. They have both agreed on 3-year partnerships to recruit and train churches/mosques in our partnered villages. Together, we will create different versions of the main curriculum to fit each religion by incorporating specific messages relevant to MCH from their sacred texts and philosophies. Once trained with the curriculum, religious leaders will use 10 minutes at the end of their weekly preaching sessions to repeatedly deliver short curriculum lessons to their congregation, which widely spans from pregnant women but also disinterested men including expecting fathers. All versions of our curriculum will be heavily image-based and also include animative video components for the ease of community education sessions and increased accessibility for illiterate community members.

We will measure the impact of our projects by evaluating the number of community health workers and religious leaders trained; the number of villages actively participating and religious services enrolled; the number of lessons delivered both at home and at religious service; number of community members enrolled in the education program; and pre and post comparisons of the community’s MCH knowledge levels and uptake of MCH services, such as antenatal care attendance.

Project Timeline:

| 2022       | • Train community health workers in Bugembe – completed  
|            | • Establish partnerships with religious organizations, local health NGOs, and hospitals – completed  
|            | • Launch pilot and start educating/enrolling pregnant women – in progress (pilot until April 2023) |
| 2023 Jan-Mar | • Adapt CCI’s 2022 version curriculum to include religious stories & images for both religions  
|            | • Finalize partnership with Budondo & religious leaders and prepare scale-up to 38 more villages  |
| Apr-May    | • Develop animated video components for 2023 curriculum  
|            | • Distribute finalized curriculums to local partners for confirmation/feedback  |
| June       | • Re-training Bugembe & training Budondo community health workers (Target 1,2)  
|            | • Conduct baseline research on initial levels of community awareness of MCH to capture impact  |
| July-Aug   | • Training religious leaders in Bugembe & Budondo; launch program in religious services (Target 3)  
|            | • Establish a ‘Training of Trainers’ model to continue training more religious leaders after the summer  |
**Project Title:** Saving Mothers and Babies: Launching Maternal and Child Health Education in Ugandan Villages  
**Project Location:** Jinja, Uganda  
**Nominating Institution:** University of Pennsylvania (Penn)  
**Project Lead:** Seungwon Lee, Penn ’23 Neuroscience (Home country: South Korea)  
**Project Member:** Julia Gerbino, Penn ’25 Design (Home country: U.S.A)

**Personal Experience:**

Seungwon Lee founded and has run Communities for Childbirth International (CCI) for the past year. Under her leadership, CCI grew from a small student project to an established organization with a headquarters office in Jinja that now works with 60+ members, including community health workers, an employee, volunteers, and researchers. She continues to create an impact by empowering many Ugandan villages, especially the vulnerable populations, and collaborating with prominent organizations, such as the Ugandan Red Cross and Jinja Regional Referral Hospital (the largest hospital in Eastern Uganda). She is also a global health researcher in MCH, with two papers published and two more under review.

Julia Gerbino has been the Head of Design for CCI since February 2022. She oversaw the illustrations for CCI’s 2022 curriculum that features over 150 images of various MCH topics. The curriculum received highly positive feedback from the villages in 2022: they appreciated how the content were laid out visually and how the illustrated people, settings, and cultural practices were relevant to their daily lives and looked ‘Ugandan.’ In addition, she works as a student animator to create animated educational material on climate change and sea level rise. Also, she serves as the Head of Design for the Penn Healthcare Review, overseeing a team of designers for global healthcare news.

With our combined backgrounds in global health science, nonprofit leadership, and design for social impact, we hope to create innovative and culturally contextualized curriculums and better equip Ugandan villages with the right tools for enhanced MCH: with the one goal to save the lives of mothers and babies.