

## **Partnership between Maastricht University and Hawassa University (Ethiopia)**

Since March 2017 we have an ongoing and intensive collaboration between Maastricht University (Department of Family Medicine) and Hawassa University (Department of Public Health). Dr. Selamawit Mengesha is head of the department of public health in Hawassa and runs a research program on nutrition. She got her PhD at Maastricht University in 2015 for her thesis about the father's role in child nutrition. Dr. Mark Spigt runs several projects in Ethiopia with a focus on introducing effective innovations in public health. He was also Selamawit's supervisor for her PhD-thesis. Within the current collaboration, Selamawit and Mark supervise Dutch students who do their scientific internship at Hawassa University.



*Photo (by Ger Lammer): Selamawit Mengesha receives her PhD diploma out of the hands of Prof. dr. Geert-Jan Dinant in 2015.*

### **2017 The relationship between hygiene and acute malnutrition in young children**

Merel van Cooten (bachelor Health sciences) was the first student in this collaboration to do her internship in Hawassa. She used data from the national Ethiopian Demographic and Health Survey (EDHS), round 2011. Her study involved 7209 rural living children. She showed that almost 60% of households did not have a safe source of water and 95% did not have some kind of functioning toilet facility. 12% of the children was acutely malnourished at the time of measurement and this percentage was even higher when the household had no proper toilet and no access to clean water. The results of her study were published in the journal *Maternal Child Nutrition* and can be accessed here: (<https://onlinelibrary.wiley.com/doi/full/10.1111/mcn.12631>)



*Photo: Merel van Cooten helping with data-collection in rural Ethiopia.*

### **2018 Nutritional status of patients at Hawassa University Hospital**

Vera van Velzen, Puck van Kraaij, Chris Blom and Marije Schüller did their scientific internship in the hospital of Hawassa University. They found that approximately 80% of patients in the internal medicine unit were malnourished. Especially nurses acknowledged that they did not have enough training to deal with malnutrition among hospitalised patients. The food provided by the hospital could be improved. Most people did not eat the food hospital, but relied on the food that family and friends brought them.



*Photo: Chris, Puck, Vera and Marije in one the national parks of Ethiopia*

### **2018 Stuffed animal project**

The students of the 2018 batch organised a charity project in relation with their internship at Hawassa University Hospital. They collected stuffed animals among friends and family. These toys were brought and shipped to Hawassa to distribute among the children that were hospitalised. This way the hospital could give the children some comfort during their stay, and of course when the children recovered, they could take the stuffed animal home. The students collected soo many animals that the hospital had enough for the coming years.



*Photo: Marije, Chris, Selamawit, Vera and Puck kicking of the stuffed animal project*



*Photos: If you have never seen a stuffed animal in your life, it can be quite scary in the beginning, but almost all children love some soft company.*

### **2019 Chronic care for HIV-patients, with focus on healthy nutrition and exercise**

HIV/AIDS has become a chronic disease due to the availability of effective medication. The health care system of Ethiopia, however, is challenged by the dual burden of acute and chronic patients, with little experience in organising chronic care. Four health sciences students (Babette Spaargaren, Caroline van der Starre, Stephanie Lako and Rianne Tanis) helped with collecting data among HIV/AIDS patients in three different health centres in the area of Hawassa. This study will be the PhD-project of Yadessa Woldie, who will defend his thesis at Maastricht University somewhere in the coming years.



*Photo: Yadessa with health sciences students visiting households in Yirgalem*



*Photo: Babette, Caroline, Rianne and Stephanie visiting a rural household.*

### **2019 Antenatal care nutritional counseling**

Eve Millerot (bachelor Biomedical Sciences) investigated the association between low birth weight and nutritional counseling during pregnancy. Many children (around 13%) in Ethiopia are born with a low birth weight. This gives them a huge disadvantage at the beginning of their lives. They are at higher risk of dying, or unsuccessful development in their early childhood. Good counseling during pregnancy should make the mothers more aware of the importance of good nutrition, during pregnancy and in the early years of the lives of their children. Eve used data from the Dale- Wensho Health and Demographic Surveillance to investigate the counseling during antenatal care visits. It showed that only 21% of mothers received nutritional counselling, while 77% of the mothers consumed less calories than recommended. The data was still collected when Eve had to write her thesis, so her dataset was too small to investigate the relationships with birthweight of the babies, but this will be investigated at a later stage.



*Photo: Eve (second from the left) attending a conference at Hawassa University together with the other students.*

### **2019 Fund raising for tablets**

Ethiopia has established an international program that facilitates the collection of health data, the Demographic Health Survey (DHS) program. A typical DHS includes registration of birth, death and migration, marriages, divorces, changes in status and household relationships, fertility estimates and health events. Through sharing of data-collection methods and sharing of actual data, the capacities of these small bureaus of statistics have grown over the years. Hawassa University recently started the process of launching a DHS system. Establishing such a DHS system is crucial for a university. It serves as a sampling platform for several epidemiological studies, allowing the longitudinal follow-up of the population and the assessment of specific interventions. The DHS of Hawassa University, the 'Dale Wensho DHS (DW-DHS)', started paper-based data collection in the way that all other DHSs of the country started. However, the paper based data collection is very costly and labor intensive. The data collection and data entry each take three to four months, and many data collectors and data processors are needed. Dr. Selamawit has asked Maastricht University to help in financing the tablet data collection system, through financing the tablets. All students visiting Hawassa in 2019 raised funds for the tablets. They launched a huge social media and WhatsApp campaign to collect no less than 3,500 euro.



*Photo: Currently the data for the DHS is collected through paper surveys, but in the near future this will be done using tablets, saving lots of time and resources.*