Community-based education is one important part of the curriculum at Jimma University (JU) in Jimma, Ethiopia. Medical students in their last year participate in the TTP (Team Training Program) during their internship. Together with pharmacy students, environmental students, Health Care students and dental medicine students they are sent to a Health Care Center to serve the community. The students stay at the compound for two months working under supervision of JU staff at the health center and doing outreach programs.

Asendabo, overall situation

Asendabo, the village I went to, was about 50 km east of Jimma on the road to Addis.
The catchment area includes 8 kebeles (districts) with a total population of 48,111 people (7890 are children under five).
The main ethnicity of the population is Oromo (95%) and most people are Muslim (92%).
At the Health Care Center are two trainee nurses and five diploma nurses, one trainee lab tech and one diploma lab tech, two pharmacists, one midwife and two health officers as well as some non technical staff. There are two OPDs (outpatient departments), one for children under five and one for adults and children above five years. Furthermore, there are two chronic illness follow-up rooms and two admission rooms (one for male, one for female), each containing four beds. For maternal health there is one family planning room, one antenatal care room, one admission room containing three coaches and a postnatal care room with one bed. Some of the drugs needed can be bought at the health care center’s pharmacy and at the laboratory stool examination, sputum and some easy blood test e.g. for malaria or HIV quick test can be made. There is no ultrasound or other technical equipment other than a blood pressure cuff and a microscope for the laboratory.

The opening times are Monday to Friday 9.00-12.30 o’clock and 14.00-17.00 o’clock. There is always a night and weekend shift but patients normally just show up at the opening hours. The interns take turns at the different departments and the outreach programs. One intern per day is on call for emergency cases during the night or lunch time.
Living Situation

There are two buildings for the male students and one building for the female students as well as one common room with table tennis and one dining table. There used to be several showers with running water and even flushable toilets but right now there was no running water. We had one bucket that we could fill with water and used an empty tin to shower. The toilet was about twenty meters away from the main compound. That condition might sound uncomfortable for somebody not used to it, but everything was clean and warm water is a luxury you will rarely find and need in Ethiopia. One fact that scared me a bit but not the Ethiopians was that you sometimes could hear the hyenas cry at night when I was going to the toilet. The Ethiopians told me that you can hear them even when they are two kilometers away. (Which did not give me much more comfort, as I still did not know, whether the hyenas I heard were closer waiting for a nice and fresh faranji). Before I came to Ethiopia I was quite afraid of barking dogs, the hyenas cured me!

There were three women cooking for us and cleaning our rooms once a week. The students got a certain amount of money for their stay and some bag of “teff” and “shiro” (grounded chickpeas). As the money given for one student is calculated by the university you should ask in advance whether you should pay for your food when you plan to stay for the whole two months of your internship. I shared a room with three other girls (two of them shared a bed as the forth bed was our “wardrobe”). Some of the students went back to Jimma on the weekend once in a while, but as I stayed just two weeks I did not go.
Medical Situation

One fact that surprised me a lot was that patients mainly showed up at the opening hours. While in Germany patients are also coming at night or at weekends, I saw hardly any patients during off hours unless some women in labor.

The top ten diseases patient showed up with were

- malaria
- pneumonia
- gastritis
- helminths
- lower urinary tract infections
- anemia
- arthritis
- tuberculosis and other lower respiratory infections
- upper urinary tract infections
- skin diseases

Almost 50% of the patients visits were due to malaria but only about 27% were lab confirmed. Patients with malaria showed symptoms such as fever, chills and headache or back pain. Every patient with fever and headache was checked for malaria. Even when there was no positive result, the patients often were treated empirically especially when he or she lived far away from the health center. Possible reasons for the high incidence and prevalence rate of malaria are that the area is endemic for malaria and people do not use their bed net appropriately or they do not have one at all.

Patients that showed symptoms of pneumonia were treated with antibiotics. The sputum of all patients suspected to have tuberculosis was taken and patients with positive results were also treated with antibiotics. If possible they had to come to the health care center to take their drugs in front of the doctors to ensure the patients compliance. If necessary a patient would be referred to Jimma Hospital for an X-ray but as it is a long travel patients did not like it much to be referred. Any patient that showed up with TBC or herpes zoster was tested for HIV. Luckily I did not see a single positive patient.

For general examinations we used our hands, stethoscope and a torch. Sometimes I found it difficult when pregnant women or women in childbed showed up with bleeding to find out the reasons as we had no ultrasound. But when the interns had doubts about the reason, they would either admit the women or sent her to Jimma Hospital.
At the under five OPD most children were either malnourished cases or suffered from diarrhea. We treated them with nutrition solutions and when possible advised the mother how to breastfeed properly. Other children had measles, pneumonia or malaria. One patient that I will keep in mind was a little girl that had a swollen body. At first we thought it could be due to a post streptococcal glomerulonephritis but there was also the possibility of Kwashiorkor. We admitted the child as it was very difficult for the parents to go to Jimma Hospital.

### Outreach Program

Together with the environmental students, the dental students and the health care students, some of the interns and I went to a secondary school to give the pupils some education on HIV. When we arrived there the interns asked me whether I would tell the pupils about HIV and one of the interns would translated afterwards. I was quite surprised and unprepared but I managed to give a little speech about the dangers of HIV and how to prevent it. After the intern had translated the students gave some additional teaching in how to use condoms and answered questions. At the end we offered free HIV tests to all pupils. Luckily there was no positive result at all. We told all students to get a second test after three months to be sure to be negative.

### Personal Experiences

After day and time for my departure had changed three times within one day I was finally picked up on Saturday April 30th 2011 early in the morning at 7 o’clock (Western time). When I arrived at the compound I was introduced to Dr. Guteta, the group leader of the interns. He showed me the compound and the health care center and introduced me to the other students. I got to know the two girls (both called Hillena) I shared a room with. As Saturday was market day I joined them for “grocery shopping”. After we had bought
vegetables we went to the butcher to get some meat while some of the boys went to buy a sheep that could be slaughtered for a campfire. At the butchers there were some old men eating raw meat, an Ethiopian specialty. When they saw me they offered me a piece of meat. I had no choice but taste it, actually it did not tasted too bad…

On the Monday after my arrival we slaughtered the sheep and made a campfire. Sitting around the campfire, playing games and chatting I got to know the group better and started being a part of it.

In the evenings we would go for a walk and eventually have a “chai” (tea) or “buna” (coffee) and some corn cob. We also made several coffee-ceremonies or played cards or table tennis.

On another Saturday we walked to the Gibe River which is about one and a half hour away. On our way we passed a lot of women carrying their goods on their head to sell them on the market. At the Gibe River we rested a bit and watched the birds. I even saw a hippopotamus.

After having spent some weeks in Jimma I enjoyed the quietness on the countryside a lot and was happy to really get to know some of the students closer.

**TTP for LMU interns (Praktisches Jahr Allgemeinmedizin)**

The health care system in Ethiopia is mainly based on Health Care Centers and hospitals located in the major cities. There are few private practices on the countryside, and for most patients the hospitals are too far to reach. Therefore, the health care center serves the purpose of a family doctor´s or general practitioner’s practice in the German context. Patients with all kind of diseases show up at the health care center.

As I spent most time at the adults’ outpatient department I did a lot of physical examinations and helped to take the patients history. I learned to diagnose a cardiomegaly by only using my stethoscope and examining the patient physically. Another time I was in charge for a patients’ suture (he had a laceration on his head) and helped to attend the burns of a women. I even joined the laboratory once and was shown microscopic slides of patients with malaria or tuberculosis. By the time I got more skilled in triaging the patients. As the resources are limited, it is not possible and of course not necessary to refer every patient to a hospital. Most of the diseases were treatable with medications available at the health care center.

If I had stayed longer than only the 2 weeks that I had, I also would have joined the chronical illness department. The patients treated there had mainly high blood pressure, diabetes or epilepsy.

LMU Students who want to participate in TTP as a part of their internship in
General Medicine (PJ Allgemeinmedizin) should as well join those departments as they can actually follow an individual patient for a longer time. Every second week the interns had to write and to present a case report and an activity report. By discussing their achievements and problems with their supervisor they improved their work as well as their soft skills.

Some advice for students who want to go to TTP

In Asendabo there were some of the usual Ethiopian shops that sell mobile cards, cookies or “soft” (toilet paper), but if you need a special kind of battery (they have the standard sizes) or other special things, make sure to bring them from home or get them in Jimma. You will not need much money. I spent about 10 Birr a day (when I was in Ethiopia that was about 50 Cent). At Jimma University you can get change. You also should know that it is not possible to lock your valuables. It is not necessary and I never had the feeling it could be necessary, but if you do not like this idea you should know it ahead. We had bed nets around our beds but they were not new so you maybe should buy one in Jimma (they are cheaper there than back home). There are no blankets or sheets on the mattress, so I was lucky to have my inlay with me. There are no internet Cafes around but the mobile network worked most of the time.

If you have the possibility to go to Jimma Hospital first before you go to the health centre, you should go there as you will have to adapt to a very different situation and I felt that being at Jimma first helped a lot.

You will certainly have a great time and get friends with the Ethiopian interns. If you have any questions considering the TTP do not hesitate to contact me.

Marie Tzschaschel

(June 2011)