

# Gordhim Hospital

## Surgical Mission February 2015



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## **1. Foreword**

The written report about the surgical mission in Gordhim/ South Sudan has the focus on the objective aspect but not of the current situation and culture role that the surgical mission is bringing. Patients walked for over two days to reach Gordhim and could not pay for transport or buy food due to lack of money. Many patients were sent away without screening because, the human and time resources of this project were limited. The entire hospital team had a high responsibility because people in this area have high expectations of hospital personnel and blame them in case of patients' death. All these facts were included in all decisions that were made during the entire surgical mission process.

## **2. Acknowledgment**

The process of conducting a surgical mission in Gorhim Hospital was a result of combined efforts and support of various stake holders.

Arkangelo Ali Association would like to thank all members of the surgical team from Johanniter Krankenhaus Geesthacht Dr. Frank Templin, Dr. Michael Perschman and Dr. Diana Joseph for their willingness to come to Gordhim to support the people of South Sudan and perform 70 operations and for providing additional funding for materials and drugs.

Thanks to the Catholic Church for their hospitality towards the surgical team.

Arkangelo Ali Association would like to further thank the State Ministry of Health Aweil, Minister Tong Deng Anei who gave approval for this mission and for supporting this mission with materials and drugs. The Director General of NGBS Dominic Athian for the warm welcoming of the German Team and his availability in case he was needed. The Director of County Health Department in Mabil, Isaac Yei as well, who always listens to the challenges of Gordhim hospital and gives support to find solutions.

Additionally, we would like to warmly thank Dr. Dut from Aweil Hospital who took care of one of our patients after the mission had ended and Agnes Akullo, an expatriate anesthesia nurse from Hospital Marial Lou. Without her help the surgical mission would not have been able to perform so many surgeries.

Gordhim Hospital would like to acknowledge the financial support received from Misereor Germany for this surgical mission.

Also appreciated are the following staff members of Gordhim who played a big role in conducting the surgical mission. TB Officer Catherine Kamwitha who gave good advice from her former experience for this mission and took over all the organization of the expatriate compound together with her heavy workload concerning TB during this time. Nalubuulwa Prosscovia, the comprehensive nurse, who took over together with her day duty in Maternity the standby night duty for the post operative patients. Gabriel Atem the national certified nurse, supported the first screening and registration of patients, preparation of the theater and worked during the mission as an anesthesia nurse. James Garang the assistant pharmacist supported the preparation of drugs and material deliveries. During the mission James Garang took care of the theater drug and material store and together with Lino Kuol, he was responsible for the sterilization of instruments. Angelo Mou, senior assistant nurse, who also supported the preparation of the theater and worked as a scrub nurse during the mission. Further thanks goes to all staff who were not mentioned but, were involved in the surgical mission. Only because of their high commitment these staff members had to work often overtime, due to lack of staff members for the surgical mission and there were no restrictions in the project and achievement of objectives.

### **3. Background**

AAA is an NGO that is specialized in TB and Leprosy and runs 13 different health facilities in 10 states of South Sudan with their main focus on TB and Leprosy but, other departments too. One of these health facilities is based in Gordhim, Northern Bahr EL Ghazal State. Gordhim Hospital is a TB Hospital, which takes care of about 70 admitted inpatients and over 300 TB patients in Gordhim outpatient's program. Beside TB program, Gordhim Hospital runs a 24/7 Outpatient Department with the focus on TB, Malaria, Emergencies (e.g. insect bites, injuries, high fever) screening and treatment of different infections. In OPD 80-100 patients are seen on a normal working day. The Maternity department that is open eight hours a day, six days a week, focuses on antenatal Care and Immunization of mother and child. Deliveries are offered in a limited number due to lack of national educated staff.

As a young nation, South Sudan is one of the poorest in the world. The medical situation from the WHO fact sheet, reflects the current situation. Only 44 percent of the population have access to proper health care. Maternity mortality in South Sudan is the highest worldwide. In the whole country there are only 86 registered doctors for over eleven million people. Due to this fact, most hospitals are working only with certified nurses and clinical officers and staff who were trained on the Job. Aweil Public State

hospital in Northern Bahr El Ghazal has only one national surgeon for a population of over 720.000 people.

With the financial support of Misereor, a German organization, Arkangelo Ali Association has conducted 5 different kinds of surgical missions since 2008 until 2013. The demand for all kinds of surgeries is high. General surgeries, plastic surgeries and gynecological surgeries that do not require long term post operative care or long term drug therapy could be performed at Gordhim Hospital.

Since the last Report by the former Matron Wanda Laszcyk in 2012, there have been major changes of personnel. Due to the cut of the Global Fund we went from 29 staff members in 2015 to only 19 staff members. For that reason AAA sent the experienced anesthesia nurse, Agnes Akullo from another hospital to Gordhim Hospital and we had to hire two additional casual workers. All staff members of OPD had to work overtime to ensure that the patients received proper care and treatment after their surgeries.

#### **4. Process Surgical Mission**

In this report the process of the surgical mission is divided in three different steps: Preparation, implementation and following up.

##### **4.1 Preparation**

In 2014 the preparation for the next surgical mission started. During the screening of the outpatients the OPD staff registered all patients needing surgery. After a short time it was clear that the need for a general and a plastic surgeon was enormous, initially to relieve patients from long term pain, stigma and discrimination. But there was also a high demand for eye surgery (especially cataract) and gynecological surgeries such as fistulas.

Due to the political situation in South Sudan and news coverage in the european media, it was not easy to find European doctors who were willing to come to South Sudan for a surgical mission. After some months a general surgery team from Germany was found. Contact with Ministry of Health was made to get approval and support for the surgical mission. The German doctors put their focus on hernia, hydrocele and haemorrhoid operations and tumor removal. In OPD the staff registered all patients. Together with the doctors, drugs and material lists were developed. The last surgical mission that has

taken place at Gordhim Hospital was in 2012. Most of the available materials and drugs in the theater store were expired and had to be replaced. The theater and all needed equipment was maintained, wards and accommodation renovated and a sterilization hut built. Two weeks before the arrival of the surgical team, patients who registered were announced via radio to come for surgery, since most of the patients do not own a cell phone or a home phone.

After the arrival of the surgical team the doctors together with the staff members of OPD, conducted a second screening. The patients were divided into three different groups. On the first day the first group of patients in need of inguinal hernia and hydrocele operations were screened. The following day the second group of patients with tumor were screened. After 5 days the third group, patients who complained of hemorrhoids were screened. But due to the high demand, new patients arrived every day to seek help. After some days the hospital had to close their gates and, only let in registered patients or emergencies. During screening the operation schedule for the following days was prepared. Within the 10 day surgical mission, over 200 patients were screened. Some of them were treated without an operation, some had to be sent away due to the limited setting (lack of equipment, limited duration of mission or required long term post operative care which could not be provided) or patients were not operable. Over 50 patients were complaining of hemorrhoids but, after examination only two cases were confirmed. The rest suffered from either constipation or worms. They were treated with Medication.

A total of 70 patients were chosen for operation. An operation schedule was prepared daily and placed in the theater and all patients' cards were filled out. All operations were recorded on a theater registry.



Patients waiting for screenings

## 4.2 Implementation

The patients were asked to come on the operation day with a carer. The patients had to bring soap and a note book that was used as a patient record book. On the operation morning all patients were screened for HIV after their consent, so that in case of an intraoperative injury HIV post exposure prophylaxes could be applied. All patients were HIV negative. After showering the patient received a single shot antibiotic as prophylaxis, specially due to the hot season, sometimes over 40 degree Celsius, to minimize the risk of infections.

During the operation the theater expatriate and national staff were taught by the doctors. Post operative pain therapy was prescribed by the anesthetist and written in the patient's record book. All operations were recorded in the operation registry book. After the operation the patients were carried to the ward by their carers. After every operation the theater was cleaned, instruments and operation sheets were washed, packed and sterilized and the next patient prepared.



After a shower the patients were prepared.

Patients were waiting for their operation

Voluntary HIV test was done, I.V cannula were used.

The post operative care in the wards was done during the day by assistant nurses under the supervision of the matron and at night by a comprehensive nurse and the assistant nurses. First the prescriptions for the pain therapy were explained and drugs handed over to the carer. Injections for pain reduction were done by the medical staff. The assistant nurses were always around to monitor the patients. The doctors did a ward round twice a day, in the morning and in the evening. First dressing and removal of



drainage was done by the doctors and further dressings were done by the medical staff. The food after surgery was provided by the hospital. All activities and observations concerning the patients were recorded in the patient's book.

During the surgical mission 70 patients received an operation. 14 of which were children, 17 women and 39 men who. These patients can now live a life without pain and without stigma and discrimination.

- 22 inguinal Herniotomy
- 12 Hydrocelectomie
- 12 Tumorectomie
- 7 Severe keloidectomie
- 6 Lipomaectomie
- 2 Hemorrhoidectomie
- 9 others (small operations)



Theater



Ward Round



### **4.3 Follow up**

Most patients were discharged between first and third postoperative day. They received their patients book back. Due to postoperative bleeding two patients required re operation. After that the bleeding sustained and the patients were discharged a day later. Some patients were asked to come in daily for change of wound dressing as well as progress check.

Three patients stayed at Gordhim Hospital for up to four weeks to get daily dressings because they came from afar and in their home areas there are no health facilities available. After ten days most patients came back for removal of stitches which was done by the medical staff. Some of the patients went to closer health facilities in their home area for post care and removal of stitches. It was obvious that the wounds of the male patients healed faster than the wounds of some female patients. This could be the result of the fact that men have more time to rest, while women took care of their households and looked after children. Three days after the departure of the surgical team a female patient came back with secondary bleeding and inflammation of her wound. She was referred to Aweil Hospital and was taken care of by the surgeon. The surgical mission ended and, shortly after that the doctors went back to Germany.

#### 4.4 Examples

Patients with keloids before and after operation



**Patients with tumors before and after operation**



## **5. Monitoring and Evaluation of the surgical mission**

The intern monitoring was done concerning the process indicators. The financial monitoring and evaluation of the whole process will be done by Arkangelo Ali Association headquarter Nairobi.

### **Indicator 1: Number of surgical operations done**

Over 200 patients were screened and some of them were treated without an operation. From these patients 66 needed general surgical operations and four plastic surgeries were done.

### **Indicator 2: Improved monitoring of patients both pre and post operative**

The staff received teaching and explanations on how to monitor the pre and post operative patients, but due to lack of staff there is still much improvement necessary.

### **Indicator 3: Proper documentation of all activities**

There were four systems of documentation in place:

Firstly, there was a patient card in place to document the history of the disease, all procedures during the operation and anaesthesia.

Secondly, one consent form where the patients received explanations about the operation performance and risks as well as possible complications, the patients and next of kin as a witness, had to sign to give their approval for the operation and that the patient understood the explanations and risks of operation and anaesthesia.

Thirdly, the operation was recorded in the Gordhim operation registry.

Fourthly, the patients had a patient's book, where all observations and prescribed drugs during their stay were documented by the medical staff. After discharge of the patients they were given their books back.

**Indicator 4: Improved quality of health services**

All operations and after care were performed at a high standard.

**Indicator 5: Improved services in the theater**

During the mission there were two local and one expatriate anesthesia nurse. One local scrub nurse and both anesthesia nurses were taught by the doctors on proper performance, procedures and drug management. Due to the lack of staff, further teaching of other staff for instance in scrubbing or anesthesia was not possible.

**Indicator 6: Maintenance of existing buildings**

Two patient wards were renovated. Surgeons and anesthesia accommodation were painted and the kitchen got new mosquito nets for the windows. One hut for the sterilization process was built. The solar system, generator and the electronic equipment for the theater were maintained.

**Indicator 7: Number of patients identified for reconstructive surgery**

Four patients (removal of severe keloids on the face) who are highly stigmatized and discriminate were operated on.

**Indicator 8: Number of surgical cases correctly diagnosed, operated on and followed up**

Almost all operations were correctly diagnosed and well performed. An infant which was initially diagnosed with hydrocele had a hydrocele but, an old unilateral testicle torsion as well. This was successfully removed. Another female patient who was diagnosed with an abdominal hernia had a big abdominal tumor in addition to that. The hernia was repaired but, the tumor could not be removed due to the lack of proper equipment, drugs, post operative intensive care etc.

**Indicator 9: Number of patients correctly anaesthetised by South Sudanese personnel**

Due to lack of medical personnel in South Sudan there was no local anaesthetist available. One South Sudanese anaesthesia nurse performed some of the anaesthesias under the supervision of the German anaesthetist

**Indicator 10: Number of surgical operations, preparation of the theatre and sterilization of surgical instruments by South Sudanese nursing personnel first under supervision, later independently.**

Two local nurses and the expatriate nurse did all the preparation of the theater almost without supervision. Two assistant nurses were responsible for the sterilization process. Three assistant nurses were taught packing of surgical instruments and one was able to prepare the instruments for sterilization without supervision.

**Indicator 11: Skilled local personnel capable to carry out emergency minor surgeries (e.g. Incision of Abscess).**

One national nurse and one senior assistant nurse are capable of carrying out emergency minor surgeries

## 6. Conclusion

The surgical mission was a big success and highly appreciated by the population in Northern Bahr El Ghazal. All patients who were operated upon and cured will live a life without pain or stigma and discrimination. The surgical mission showed that there is high demand for surgery in Northern Bahr El Ghazal. Only a quarter of the patients were screened and the hospital had to close their gates and many patients were sent away because of mentioned limitation of this mission.



Discussion with a patient who could not get an operation

For the next surgical mission it would be good to have more medical staff available and to have more time to ensure better training on the job and to avoid overtime. In spite of the lack of surgeons and anesthetists in South Sudan, the Ministry of Health should try to send national doctors for training on the job by expatriate surgeons in order for them to get more experience in different kinds of surgeries and learn international standards e.g. plastic surgeries.

For future surgical missions consideration should be given to buying drugs which are available in South Sudan from South Sudan. Other items and materials that aren't available in South Sudan should be



brought from Europe, especially from organizations that are specialized in delivering goods to developing countries, as this could save money, since prices in Kenya are much higher than elsewhere.

For the next general surgical mission consideration should also focus on not calling for hemorrhoidal operations unless the diagnosis has been confirmed by a doctor, because it seems like the locals often confuse the term hemorrhoids with other anal conditions such as constipation or worms. Of all the 50 screened patients for hemorrhoids only two were found to have hemorrhoids.

Womens' wounds took more time to heal than the wounds of men. For the next surgical mission consider allowing women a longer stay at the hospital to make sure that they have enough time to rest and recuperate.



Farewell party for the doctors