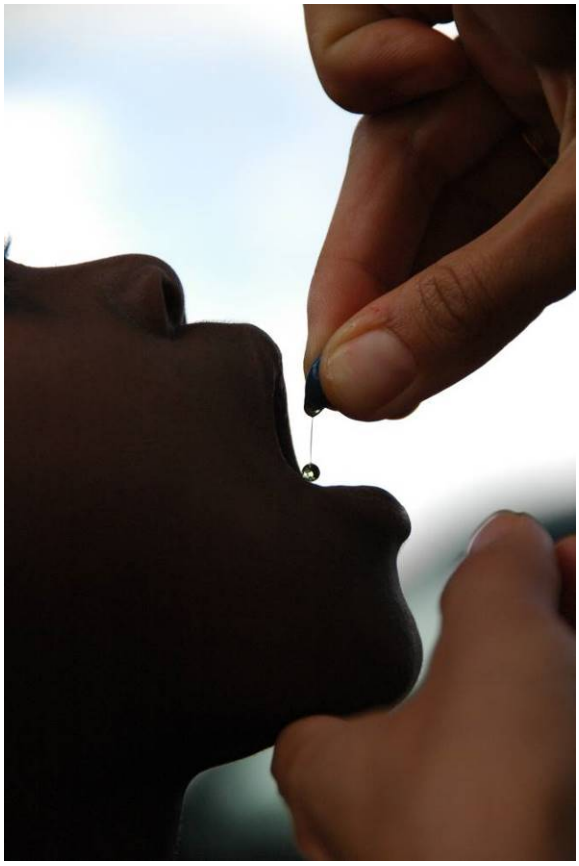
Israeli Medicine on the Equator

Kiboga Uganda Project Report
May 2015



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Contents

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1.0 Executive summary

The program "Israeli Medicine on the Equator" in Uganda has been conducted by Brit Olam and its partners since 2005. The project is based on overlapping medical teams volunteering for a period of several months. Most teams consist of two doctors or a doctor and nurse. From 2005 to 2011, almost 40 Israeli medical personnel participated in the program. The program was temporarily discontinued from 2011 to 2013, but renewed in 2014 at the welcome initiative of Dr. Reut Harel and Dr. Eitan Miron.

The main goal of the project is to provide operational assistance to the Kiboga District Hospital and support for developing its medical capabilities. This hospital is located in a rural area 120km northwest of the capital city of Kampala, in one of the poorest districts in Uganda. Furthermore, this project aims to implement an ongoing program that improves local capacities and prioritizes sustainability. This is accomplished by the provision of community clinics and an education training course to medical personnel at the hospital, to advance health practices for adults, children, and families; and thereby to improve the living conditions and quality of life of the local community in this region of Uganda. The Israeli medical team works in close collaboration with local health workers and municipality.

2.0 Health indicators and medical services in the Kiboga district and environs

The Kiboga district was deeply affected by the wars in the 1980s and the inhabitants are very poor. Some 64% of the district residents live below the poverty line and approximately 55% have an elementary school education (compared with a national average of 65%). These data contribute to the severe health problems in this district – malnutrition, high infant mortality, contagious diseases (malaria, parasites, pneumonia), AIDS, STDs, and tuberculosis.

A number of parameters reflect the depressed health conditions in Kiboga compared to other districts – the mortality rate in Kiboga is ranked sixth lowest at 46.7 years – 12.3 years below the national average. Infant mortality is 128 per 1,000 live births compared to 83 on average nationally. The maternal death rate is 650 per 100,000 live births. Childhood mortality under age 5 is 109 per 1,000 children, 12% caused by malnutrition. Finally, more than 9% of the population in this district have AIDS and live too far from a health facility for treatment.

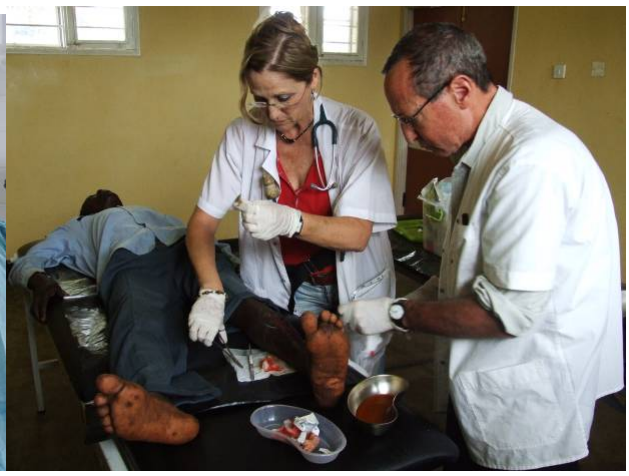
The Kiboga Health District faces the harsh reality of one medical worker for every 60,000 people, one midwife for every 1,060 women of child-bearing age, and some 5,800 residents per medical unit. There are a total of 41 medical units in the district, 34 of them receiving government support – one hospital and 40 clinics at various levels. All the clinics but one are staffed only by clinical officers and a nursing team, with no doctor. The main goals of the District Health Director are to provide basic health care to all the residents, train village medical teams to provide first response care, immunize children, and engage in nutritional monitoring – all areas in which the project medical team provides assistance.

3.0 History of program activity

At the start of this program, fieldwork was undertaken in the Namuwongo refugee camp at the outskirts of the capital city Kampala. The project included a clinic in the refugee camp, special trips to rural clinics, and initial training of groups of youths and women on various health issues with the goal of having them teach the community and thereby transmit this information.

After three years of activity, it was concluded that other regions in Uganda are in greater need of medical services. A decision was made to transfer the project to the Kiboga District, and to concentrate on providing assistance to the rural populations.

Upon transfer of the project to the Kiboga area, collaborative efforts began with the World Vision organization to establish clinics, provide medical assistance, and identify local activists. Collaboration was also fostered with the District Health Directors to understand the needs and provide help where basic medical care is not provided by the district. In parallel, a medical team began to train local volunteers as a "rural medical team" to give first response care in regions lacking doctors or medical services. From 2007 through 2010, almost 40 Israeli medical personnel, doctors, and nurses participated in the program. Medical care was extended to over 30,000 people and some 100 volunteers were trained for rural medical teams.



Fieldwork was temporarily suspended in 2011-2013, but renewed in early 2014 when a team of two volunteer doctors volunteered for a year in Kiboga. In the framework of the renewed project, these volunteer doctors worked primarily in the hospital, treating hospitalized patients.

Once every two weeks, the volunteer doctors paid biweekly visits to field clinics to provide outreach medical care to villages remote from any medical facility. Over the course of one year, medical care was provided in the hospital to approximately 3,500 patients and 700 more in field clinics. Additionally, lectures and training workshops were held regularly for the clinical and nursing staff in an effort to expand their knowledge and improve the care they give to Kiboga residents. A relieving volunteer team arrived last December, 2014 for six months with new delegations of doctors and nurses planning to continue the work for periods of three to six months each. The project has focused on the following initiatives since 2011:

- **Assistance in hospital work**: Only one doctor is on duty at the hospital at any given time, and this doctor is primarily occupied with performing caesarian sections and other emergency operations. Most of the patients at the hospital do not see a doctor at any time during their hospitalization. The patients are admitted to the hospital by clinical officers with basic training and during the course of their hospitalization they are monitored only by nurses. The volunteers work closely with the local medical staff, and engage in diagnosis, treatment, and follow-up of the patients hospitalized, as well as treating emergency cases and advising the clinical officers and local doctors as required.

- **Rural outreach clinics**: Twice a month, field clinics are conducted in remote areas that are far from any medical services. These clinics operate out of churches or stores donated for the benefit of the community and the work is done by the volunteers with the assistance of a team of nurses who help in translating, performing examinations, and treating the patients. The goal of the clinics is to provide services to a destitute population that cannot reach health facilities in the district. At these clinics, triage is performed, the patients are examined, and medical treatment is given or a referral is made to a larger medical facility, as needed. HIV tests are also conducted there. There is a broad range of cases including untreated chronic problems such as convulsions, diabetes, hypertension and complications, as well as infectious diseases such as malaria, respiratory infections, skin infections, diarrhea-related illnesses, STDs, etc. During these clinics, a team of nurses gives talks to the villagers about preventive medicine.

- **Training for the medical team**: Because of the small number of doctors, most medical care in the governmental health system of Uganda is carried out by “clinical officers”– staff members who have received basic medical training in treating common medical problems. Some of the clinical officers are very talented, but most have large gaps in their knowledge and often make mistakes in diagnosis and treatment. In the framework of the project, the volunteers met with the clinical officers and the nursing staff for talks

and conversations on various subjects and to increase their knowledge and improve the treatment of patients.

4.0 Comprehensive review of project activity 2014-2015

The District Hospital in Kiboga

The hospital has 120 beds divided among four wards – gynecology (primarily maternity), pediatrics, women's, and men's (each comparable to a combination of internal medicine and general surgery). Although this is a district hospital, resources are extremely sparse. In addition to inpatient wards, the hospital has an emergency care unit, an AIDS clinic, TB clinic, pregnancy follow-up clinic (resembling a well-baby clinic), and a dental clinic (which primarily carries out extractions because of a lack of instruments). Only four doctors are employed in the hospital, although in practice there is only one doctor on duty in the hospital at any one time. The local doctors are often not in the area, but doing other jobs in the capital city or in agriculture (An on-call doctor is expected to be on duty in the area, but in reality there is no one). One physician is a gynecologist, and the others are general doctors without specializations. General doctors here are authorized to carry out all procedures, including C-sections and obstetric emergencies, trauma treatment, and surgical emergencies.

In the day-to-day hospital operations, patients who arrive in the emergency unit are seen by a "clinical officer". This profession, common in many African countries, evolved due to the critical lack of doctors – they are given three years of study and trained in the basic treatment of common illnesses and identifying emergency cases. In the emergency room, the clinical officer

performs an initial evaluation of the patient and very preliminary tests (because of the limited means), provides treatment, and hospitalizes patients. Although doctors on duty are expected to see patients in the wards and oversee the treatment and evaluation of the clinical officers, the doctor on duty is generally busy in the operating room carrying out emergency surgeries. It is rare that a doctor manages a quick trip to the wards and is generally summoned only for the most difficult cases. In practice, there are no doctors' rounds in the wards. Clinical rounds are run exclusively by the nurses – usually only one nurse per ward of some 30 patients.

Many patients are hospitalized with incorrect or no diagnosis, no further testing is carried out beyond the initial examination of the clinical officer, and there is no monitoring of improvement or deterioration in the condition of the patient (a patient may be in critical condition in the ward without any medical staff being aware of it). What's more, many patients do not receive the treatment prescribed for them either because of a lack of medications or the heavy workload of the duty nurse or because the nurse never showed up for work at all.

The physical conditions in the hospital are also far from conditions in Israel – the medical ward is actually one large room in which patients lie in beds set next to each other without any curtains or minimal privacy. All examinations are carried out in the same room; only when a particularly intimate examination is done (a pelvic or rectal examination), do the nurses bother to place a kind of half curtain that gives a limited illusion of privacy. **The hospital does not provide bedding or food to the patients, and patients may leave the hospital in severe condition because they have no money to buy food. The hospital has not had running water for 8 years, and even for operations, the surgical team washes with water from a jerry can (with mud on the bottom).**

Electric outages are frequent and entire weeks can go by without electricity. Fuel for the generator is not always available, and the lack of electricity sometimes does not allow for lab tests, running the operating room, or giving oxygen to patients. The X-ray machine works only the first two hours of the morning (after which it heats up and stops working), and the ultrasound machine stopped functioning some time ago. Most of the lab machines work several days a month on average (either due to technical problems, a shortage of reagents, or the absence of trained staff to operate them). As a result, many patients are referred to private labs for basic tests, but cannot afford the medicine or examination they need.

Medical supplies and equipment are also limited, and often sub-optimal treatment is given because of the lack of an alternative. Although care in a government hospital is deemed to be supported governmentally, medications (even scalpels) are often lacking, and patients are sent to buy them in private pharmacies. In addition to bedding and food, the patient is also expected to bring other “medical” supplies from home – gloves, cotton, even plastic to cover the delivery-room bed or operating table.

Considerations for choosing treatment are often dictated by how a medicine is given – for example, a prescription for a medication administered once a day is preferable rather than one that has to be injected four times a day (since the chances of finding a nurse available to inject four times a day are significantly lower), sometimes at the cost of choosing a treatment that is not ideal for the patient.

When the hospital does not have the facilities for treating a complex medical condition and the need arises to transfer the patient to a larger hospital, another obstacle appears – the transfer of a patient takes place in a arrangement with a driver, with no medical staff, and the family is often required to pay for the fuel (a huge sum for many patients).

Maternity ward

The gynecology department is one of the most crowded in the hospital, with two midwives responsible for the ward, the operating room, and the delivery rooms. The doctor on duty arrives, as noted, only in emergencies or when he is summoned to carry out C-sections.

Prenatal care is insufficient and most women are not aware of the timing or duration of their pregnancy. Pregnancy monitoring consists of 0-2 visits to a nurse, without ultrasound or a doctor's visit. The delivery room looks like none in Israel. All the women about to give birth wait together in one room during labor (some on a bed and others on the floor). Instead of a fetal monitor, a midwife arrives once every few hours to see how the woman feels and listen to the fetal pulse with an instrument called a fetoscope (a kind of metal tube with one end placed on the abdomen and the other end at the nurse's ear). Only in the final stage of labor is the woman transferred to a bed with a curtain. At the completion of the delivery, everything (including the mother) is washed with bleach and the next woman comes enters.

The work pace is shockingly slow; even in emergencies. Much time passes until the doctor is called or the woman in labor is brought to the operating room (when a woman in Israel would be rushed into the operating room in minutes, here it could be delayed even by 1-2 days). After the delivery, no follow-up occurs. Newborns are placed in the beds with the mothers, and the mothers are expected to report if they are concerned about anything. **All this, combined with the abject poverty, substandard living conditions, limited access to medical care, and a variety of endemic infections lead to a soaring rate of complications and 15% infant mortality.**

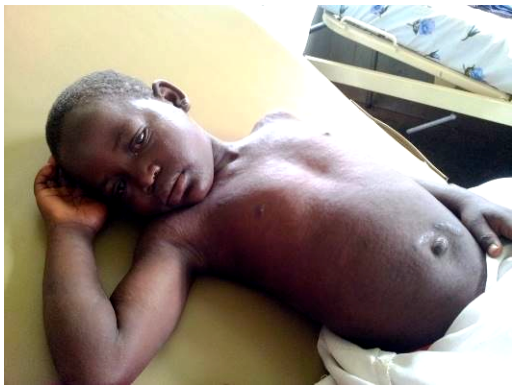
Women's and men's wards

All patients older than 10 years are placed in men's or women's wards. These wards contain a range of patients, from those with severe malaria or other infections that require IV to a variety of surgical cases (hernias, intestinal blockages, gallbladder duct blockages), motorcycle accidents, victims of violence, HIV-positive persons, or TB patients with multiple complications. The 30 beds in each ward are placed in the large space without partitions, with the distant segment of the room designated for TB patients (in an effort to reduce disease transmission). Each ward is staffed by one to two on-duty nurses, though it is not rare for entire shifts to pass without any staff there whatsoever.

Intake in the emergency room is performed by clinical officers, who dispatch patients to the wards with a hospitalization form that details the assumed diagnosis and treatment instructions. The treatment itself is meant to take place in the ward. The patients are assigned one of the beds (they have to provide their own sheets and blankets), and await a nurse who will review the hospitalization sheet in order to initiate treatment. Sometimes a day will pass before someone arrives to give them their first treatment. Some patients receive improper treatment as the clinical officer who did intake did not perform a physical examination or erred in the diagnosis.

The project volunteers visited these wards on a regular basis and made sure that a doctor examined every patient at least once during his/her hospitalization and that there was monitoring of the treatment decisions and prescriptions. In more complex situations, the volunteer doctors carried out examinations and tests (basic, as available locally), which generally entailed a struggle to ensure that all the instruments and people were working; they consulted with a range of specialists in Israel and Uganda; made an effort to obtain the proper medications, some of which were not available in the hospital; and applied their best efforts to ensure that the patient received the optimal treatment under the circumstances.

Pediatric Ward



Children from time of birth up to age 10 are hospitalized in the pediatric ward. The children in this ward have a wide range of medical conditions, from malnutrition, whose incidence in this district is extremely high, to congenital diseases and defects, respiratory infections, severe malarial infections (including cerebral malaria causing convulsions), tetanus, rabies, snake bites, poisoning, and a host of accidents and burns that are common here because of the living conditions (infants without helmets conveyed on motorcycles, cooking on the floor, widespread use of extermination chemicals), and minimal supervision of children.

This is the only ward in the hospital run by a demanding nurse who is committed and serious. Accordingly, it is the only ward in which it is rare to have an unstaffed shift, and most of the children here receive the medications prescribed for them.

Nevertheless, the hospital procedures are the same, most of the children never see a doctor at all, and not all the clinical officers who hospitalize these children know how to deal with the severe cases. The mortality rate of children in Uganda is shockingly high, and the ward serves as a kind of ICU, as at any given time there are children with life-threatening illnesses. The volunteers of this project examine the hospitalized children on a routine basis, do tests, diagnose, and oversee the treatment of complicated cases of children with life-threatening conditions.

Outreach clinics

The Ugandan health system is organized so that there are government health centers in the large towns where, ideally, there is a general doctor, but more commonly a clinical officer. In mid-sized towns, there are “health centers” usually staffed by a nurse. Small towns and the remaining rural areas (most Ugandans live in the rural areas), have no health services at all. The

large distances and dirt roads make access to the health centers too expensive, too far, and inaccessible to a large part of the population. Thus, as part of the project, physician volunteers conducted a mobile clinic in villages in the area on a bimonthly basis.

After consulting with the District Health Director and other local medical personnel, the village of Kabuye was selected for the first clinic. Kabuye, is located one hour away on rough roads, is set in a vast pastureland in an area considered the dairy producer of the district.

The Kabuye mobile clinic takes place in a small, dilapidated room that serves as a local store, which is cleared out every time the clinic arrives. In the back of the room is the patient intake – patient history, a very basic physical examination, initial lab tests, and distribution of medicines. In the front of the room, the triage and HIV tests take place. There is a broad range of problems – many new diagnoses of HIV, many STDs and skin diseases, many chronic problems that have never been treated.

After several visits to Kabuye, a second field clinic was started in the village of Degaya. This village was selected because it is one of the poorest in the region, and many children arrive in the hospital with severe malnutrition. The clinic in Degaya is held in a church in the center of the village. Each time, dozens of villagers wait outside the church for the volunteers to arrive to receive medical treatment. The need is enormous. Several children with convulsive illnesses have never been treated. Other cases include undiagnosed TB, and a host of untreated chronic diseases, and much more.

***Some numbers**:*

At every outreach clinic, some 40-60 patients were treated. Over the course of the year, over 700 patients were treated in the framework of these field clinics.

An average of 10 patients had complicated problems and were asked to return to the clinic for follow-up. Five additional patients were referred to get to a hospital for further examination.

On each visit, an average of 40 HIV tests were given, and 2-4 new HIV cases were found each time.

Common illnesses diagnosed were malaria, respiratory infections, STDs with complications, skin infections, and digestive system ulcers.

Education and training for medical staff

Due to the shortage of doctors in the hospital (one doctor per shift in the entire hospital, as noted), intake on most patients is done by the clinical officer, as noted, who has basic training in the treatment of only common medical conditions and emergencies.

To improve the treatment of all patients and have a sustainable long-term effect, educational meeting and lectures with the clinical officers and nursing staff in an effort to expand their knowledge about various subjects identified as problematic and to modify problematic work procedures. Lectures were previously given by the volunteers, who have worked closely with the staff throughout the year and have good relations with them. The approach is positive and the staff shows great willingness to learn and change work procedures and methods. A structured educational program is currently being developed so that local clinical officers themselves will conduct lectures in the future.

Evaluation of the impact

Only one local doctor works in the hospital at any given time. Therefore, two volunteer doctors in the project actually tripled the number of doctors active in the hospital.

An average of 300 patients per month received medical care by the volunteer doctors in the hospital, including hospitalized patients and those who return for follow-up. In addition, some 100-150 patients arrived at the field clinics every month. In total over the year, approximately 3,500 patients received medical care in the hospital and 700 more in the field clinics.

Prior to the start of this project, the child mortality rate in the hospital pediatric ward was 6-7 deaths a month on average in previous years. Since the start of work in this ward, the child mortality rate decreased to 1-2 a month. Mortality rates have substantially declined in the men's and women's wards as well.

Beyond the drop in mortality rates, the diagnosis and treatment of many cases improved, and further inquiry often took place only because of the efforts of the volunteers. We feel that we are making a significant difference for many patients every day.

Improving sustainability

It is important to create a sustainable means to improve health outcomes in the Kiboga District. A structured educational program for the clinical officers and nursing staff is being implemented which will consist of staff-led lectures and discussions in common medical

diagnoses and medical management. This program is designed to self-operate by the staff and to create an ongoing learning environment in the hospital.

Another sustainable aspect of this project includes using nursing staff to be public health advocates during the rural outreach clinics. While volunteer physicians and clinical officers provide medical care, local nurses provide lectures to patients in the waiting area in topics ranging from vaccinations to hygiene and sanitation.

5.0 Project goals 2015-2017

- To send at least three delegations a year, with (preferably) two doctors (or a doctor and registered nurse) for periods of 4-6 months each
- Improving the medical services at Kiboga Hospital through establishing hospital protocols, ongoing staff training, and providing medical care to an average of 300 patients per month
- Establish a structured educational training program for clinical officers and nurses of Kiboga Hospital that promotes active participation by local staff
- Creation of a clinical and educational model that can serve as a model – fostering replication and expansion of this model in other Ugandan districts.
- Continue bimonthly outreach clinics in remote villages
- Provide nurse-driven public health education during outreach clinics

Secondary goals

- Establish an active “friends” organization to support and accompany the program.
- Strengthen ties between visiting Israeli medical teams and Ugandan medical teams through ongoing collaborative work meetings on a monthly basis
- Obtain medical equipment for the hospital and community clinics
- Recruit physician specialists to train and provide medical services
- Promote creative, supportive, and enriching activities for the hospitalized children
- Build and maintain a dynamic website
- Prepare ongoing professional reports
- Fundraise for ongoing operation of the program

Appendix 1: Project budget 2015-2017

a. Expenditure										
	Costs for 8 volunteer per year (for 2 volunteers, each arriving for 3 months)					(in US $)				Comments
			No of Items	Units	per months	2015	2016	1017	3 Years Budget	
1	Flights		2	1200	1	2400	2400	2400	7200	8 volunteers
2	Visas		2	1	50	100	100	100	300	50$ for 3m tourist visa 250$ for 1 year work permit (might charge also 100$ special pass until work permit is approved)
3	Medical license		2	1	200	400	400	400	1200	200$ per volunteer
4	Health insurance		2	95	2.5	475	475	475	1425	2.15$ per day per person (Inc. 100 days for each volunteer)
5	Personal vaccinations and medication		2	1	150	300	300	300	900	Malaria & other medications, Vaccinations
6	Communication		1	3	200	600	600	600	1800	Internet (120$/m) and telephone
7	Transport					0	0	0	0	
		Fuel	1	3	250	750	750	750	2250	
		Insurance, car repairs	1	3	120	360	360	360	1080	
8	Accommodation in Kampala		2	3	100	600	600	600	1800	
9	Living costs				-					
		Bills (Electricity, Gas, Water, fuel for generator)	1	3	100	300	300	300	900	
		House maintenance & equipment	1	1	250	250	250	250	750	
		food and house keep Expenses	1	3	400	1200	1200	1200	3600	
		House help	1	3	50	150	150	150	450	
10	Outreach work					0	0	0	0	
		staff	1	3	350	1050	1050	1050	3150	85$ for staff per outreach
		Medications &	1	3	500	1500	1500	1500	4500	

		supplies								
11	**VHT courses**				-					
		Education materials	1	3	120	360	360	360	1080	
		Refreshments for courses	1	3	150	450	450	450	1350	
		Transport for VHTs	1	3	120	360	360	360	1080	
		Sub total				**11605**	**11605**	**11605**	34815	
						-				
12		**for 4 Delegations**	4	1	1	**46420**	**46420**	**46420**	**139260**	
							0		0	
13		**For 3 visits of Senior doctors**	3	1	2500	7500	7500	7500	22500	
		Sub Total				**53920**	**53920**	**53920**	**161760**	
14		**Coordinator**	0.25	3000	12	9000	9000	9000	27000	
15		**Unexpected**	5%			2696	2696	2696	8088	
		Total				**65616**	**65616**	**65616**	**131232**	
		Overhead	10%			6562	6562	6562	13123	Including bookkeeping. Accountancy, office, Site management..
						72178	**72178**	**72178**	**216533**	
							0			
b.	**Predicted Income**						0			
	Solel Bone					**30000**	**30000**	**30000**	**90000**	
	Other Grants					**30000**	**30000**	**30000**	**90000**	
	Events and private donations					**12000**	**12000**	**12000**	**36000**	
						72000	**72000**	**72000**	**216000**	

Appendix 2: Districts and areas served by Kiboga Hospital

Appendix 3: Profile of the Program Volunteers

Brit Olam works to recruit volunteers from among the best medical personnel in Israel. The candidates are, first and foremost, doctors, graduates of medical schools, and registered nurses. There are two volunteers in each delegation – at least one must be a licensed physician – and they serve for three months minimum. Volunteer applicants will be interviewed by the program steering committee to ensure suitability for the program.

Thereafter, the volunteers will undergo a training program that includes: background material about the program and its goals, cultural and historical training, meeting with a doctor of tropical diseases, meeting with previous volunteers, meeting for logistical preparation, and formulating a work plan for the delegation.

* * *

"One day a 19-year old girl arrived after being unable to deliver through almost two days in active labor. After a delay of about two hours (until the midwives did intake), Reut and another doctor finally operated on her. The baby was blue and had difficulty breathing, but the power failed exactly at that moment and there was no fuel for the generator. The baby could not be given oxygen and died. The attitude toward death here is almost nonchalant. It's a part of the daily reality. They told the mother almost off handedly. No tears, no screams. Carry on."

* * *

"Another young woman lay in the ward for several weeks with a severe internal infection after a miscarriage. A week went by and there was no improvement. It turned out that she was not receiving the full antibiotic course every day because getting antibiotics three times a day is simply an unreasonable demand here. Even when the nurse came to give her the medication, some was missing and the patient had no money to buy it on her own. Naturally no one bothers to consult a doctor and see whether it's possible to give her a different medicine. For several days, we made sure she was receiving each and every dose of the antibiotics. What a surprise – upon receipt of the medication, her condition actually improved."

* * *

"11:00AM. It's raining cats and dogs. Women's ward. Not a soul around (apart from many patients of course). Zero out of three nurses assigned for duty came to work this morning. The medicine cabinet is locked. A psychiatric patient is roaming the ward, singing gospel songs at the top of her lungs and hugging any passersby. Eitan comes to the rescue and breaks into the

medicine cabinet. We start giving out medications. Close to 12:00PM one of the nurses shows up. No need to apologize. After half an hour of small talk, she starts working. At 1:30PM she sits down and announces she's tired. A hard day's work."

* * *

"Tuesday. A familiar face in bed 14. A young woman who we diagnosed with severe heart failure just a few weeks ago. After a tough struggle with her (since she didn't have money) and the medical superintendent (who wasn't willing to pay for the ambulance fuel), we managed to send her to the main referral hospital in Kampala, where they have a heart institute and cardiologists, for further tests. She shows us the discharge papers. Apparently she was discharged the same day. The comprehensive treatment in the Heart Institute boiled down to a single measurement of her blood pressure and a demand for $100 to conduct further tests (a small fortune, which she obviously doesn't have), not to mention the cost of treatment. Treatment in government hospitals is supposed to be given for free. A strange kind of free."

* * *

"About two months ago, Agnes in her 40s comes to the women's ward. For a year she has been unable to walk, and the situation is worsening. We check her neurologically, photograph her and consult with doctors in Israel. We reach the conclusion that she is suffering from a neurological syndrome that could be caused by a long list of reasons. As noted, however, the hospital does not have many testing options. We improvise, take a little from here and there, send blood and stool samples, do a lumbar puncture and force the lab to prepare slides and manage to rule out several causes. We are beginning to suspect that she is suffering from a severe lack of vitamin B12, but what is the cause? In a stroke of inspiration, we suspect that the woman has a massive parasitic infection that causes the shortage of the vitamin. This was a hypothesis based on a guess based on speculation, but if it is something that can be treated, there's nothing to lose. We give her treatment against the possible parasites, but are left with one small problem – no B12… After an exhausting search, we manage to find the medicine in Kampala. We return and begin giving the woman injections. A month later, Agnes arrives for her weekly injection and enters the women's ward with a stable stride…small miracles…"

* * *

"A 3-year old arrives at the hospital, unconscious and convulsing nonstop. He is suffering from AIDS, severe malnutrition, and meningitis (because one illness wasn't enough). After a thorough history from the mother, we understand that she didn't take him for treatment or follow-up in

an HIV clinic (although the treatment there is provided for free), since she: didn't know he was sick / lost the notebook / got beaten and chased from the clinic. Needless to say that she herself is on treatment. Grace, the nurse in charge, firmly insists that the mother had separated from her husband and would rather let the kid die so she can find a new man. We start examination and treatment and give the child a special milk formula for malnourished children, through a nasogastric tube. Since there is not enough staff, the practice is that the parents are responsible for giving the formula to their children. The next day we start suspecting that the mother is drinking the milk herself instead of giving it to the kid. We request that the child be moved closer to the nurse's station for supervision. Nurse Grace fiercely refuses. The kid is "dirty", she claims. After consulting various doctors both in Uganda and Israel, physically threatening the lab, and running down to a private pharmacy to buy medications that are missing in the hospital – we get results for half the tests we need and the child is getting about half the medications he should. Despite all efforts, he continues to deteriorate and dies two days later."

* * *

"A newborn arrives in the pediatric ward. Only a week old. He was born in a regular and uneventful birth in a small 'health center', and was well and happy until a day prior to his arrival. Suddenly he deteriorated, stopped breastfeeding, and started convulsing non-stop. All clinical signs pointed to tetanus and in further questioning – we found that the mother had not been vaccinated during pregnancy (this is done in Uganda since not enough of the population is vaccinated against tetanus). Yes, tetanus. This weird, life-threatening disease that you get vaccinated for in the west when you get a deep cut or an accident. A newborn can catch tetanus through an infection in the umbilical cord, but vaccination protects against it almost completely. The hospital doesn't have the required treatment for the disease (which is only available in private pharmacies in Kampala, for a hefty sum). That same night the child died in Eitan's hands.

"The same week (yes, when it rains it pours), another adorable girl was brought to the pediatric ward. Six-year old Joan came with signs of an infection in the brain (encephalitis) – impaired consciousness, confusion, with moments of clarity (in which she was very excited to see the white doctor and insisted on giving him a 'bonga' – the local high five). Upon examination we noticed bite marks on her leg. It turns out that 3 months ago the child had been bitten by a stray dog, but didn't receive a rabies vaccine. She was sent to Kampala, confirmed as suffering from rabies, and died after a few days. Rabies has a 100% death rate once clinical signs appear.

Both tetanus and rabies are diseases found everywhere, even in Israel, and are effectively and safely prevented by vaccines."

* * *

"A cute 2-year old boy named Junju arrives in the pediatric ward. He's bad off, weighs only 8kgs, is coughing and struggling to breathe. We set out trying to find out what he suffers from and it is soon revealed that the kid has a huge abscess (infectious wound) in his lungs. It could be tuberculosis or possibly another infection. After starting treatment, there was only mild improvement, and we were on the verge of transferring him to a larger hospital in Kampala. The next morning Eitan arrives at the ward and discovers that Jungu is gone. His mom took him early in the morning and disappeared from the hospital. Eitan's heart is broken thinking that Junju has joined the long list of lost patients who disappeared or went off to 'witchcraft'.

"And then came Grace, the in-charge nurse in pediatrics. Armed with Eitan's promise to get a chicken if she succeeds in locating the boy, she sets off on a detective operation, questions all the parents in the ward, finds out who talked to the mother, collects information from here and there – and then declares – "We have a lead!! Where is the chicken?" Eitan clarifies that she will get the chicken only after the boy is found, so the two set off with a fighting spirit to the nearby village, where the lead says the kid's grandmother lives. After going from house to house, the grandmother's house is finally located, only to discover that Junju and his mom had been there this morning and just left ('chicken?'). After much convincing and with much help from the extended family, Junju was returned to the ward and continued treatment with marked improvement ('chicken!!!')."

* * *

"Apparently when duty calls, our car can also function as a 4-wheel drive. After an hour and a half drive on a shitty dirt road, we arrive in Kabuye, a small village in the middle of nowhere, where we are to start our first outreach clinic. Here we are meant to meet up with a nurse who arrives once a month to vaccinate children. When we ask the locals to point us to the place where they vaccinate, we are shown a few plastic chairs under a tree in the village center. The nurse clearly hasn't arrived yet (nor will she arrive during the next few hours we spend at the village). Two men who are dressed as if they speak English approach us. A precise estimation – they do. They offer to help and take us to see the relevant personae in the village. Among others we meet the local 'VHT' (village health team) volunteer – a woman in her 50s who has some basic training. She conducts health talks in the village about various prevention issues and gives out medications to children when they come down with malaria or pneumonia. She shows

us an impressive book in which she documents all her activities. Next, we look for a place where we can hold our clinic (since plastic chairs under a tree don't allow much privacy to the patients). One of the men offers his father's shop – a 3x2 meter room, where currently 4 people are living. We agree that for a small price, the shop will be cleared on the agreed upon date, chairs and desks will be brought in, and in the shed behind the house we will be able to conduct preventative medicine health talks. All parties are content, medicine boxes are ready, and our outreach clinic will set out in two weeks' time."

* * *

"The first time we opened the clinic, we were swamped by a massive crowd. Dozens of people almost beat each other up to get in to see the doctors. Later on we perfected the system, began to work in 2 rooms, added to our team a big-boned clinical officer, who does triage, hands out numbers to the patients (in an attempt to create an orderly line), performs HIV testing, and mainly prevents the human masses from trampling us. In the back room, we and the nurses examine the patients, dispense medications, and perform basic lab tests.

"We see people who have STDs or severe chronic illnesses who have never been seen by a doctor or received any treatment (at most, they bought some medication from a nurse in a private "pharmacy" (not what you're picturing) in the village. Lots of people come who have never been tested for AIDS and there are quite a few new diagnoses. We give them a talk about the illness and send them to continue treatment in the government AIDS clinics. Children with malaria, pneumonia, and also chronic problems – such as a 7-year-old boy who has a chronic eye infection that affects his vision and does not allow him to go to school (and is already showing signs of improvement with the treatment).

"At times the work is fascinating, at times exhausting, but we hope (and are already starting to feel) that going there and treating patients who have very poor access to medical care is important and beneficial."

Appendix 4 – On compassion and love

(Email except among participating staff, February 13, 2015)

Dear Reut, Eitan, Ronen, and Yahel,

It's a hot and humid night in Kampala.
We have light in the room, the water is running, and we are bleary-eyed.
Because we really can't sleep after being with you there in Kiboga.
We saw the girl with the swollen leg from the poisonous snake bite, with no serum to ease her suffering, and the woman who gave birth by caesarian in an "operating room" that, in our small country, a slaughter house would be more sterile,
And the dozens of children in "Eitan's" pediatric ward.
A ward in a hospital like any pediatric ward, or women's ward, or maternity ward in the world.
Only…
There's no water. And if you want to cool the face of a patient, or pass a damp cloth over his feverish body, or quench his thirst, you have to go down to the bar and buy water for 150 shillings in an old oil container. And you don't really have 150 shillings (two shekel if you can do the math).
And there are no bed sheets. Who needs bedding in a hospital? What a luxury…
And there's no food for the patients. For any of the patients. Not a stale piece of bread. Nothing. Why should patients have to eat anything? Or the mothers of children with fever, lying on the floor beside them?
And no hygiene. I will not add to this. No hygiene. No bathroom in the entire hospital. Simply, no bathrooms.
And no oxygen. Two mobile oxygen units lurching through the entire hospital. And they lurch nowhere when there's no electricity. They simply remain silent.
And almost no medications. There simply aren't any. A hospital with no medicine or reasonable medical dressings.
And no way to carry the bodies of the children who die, or those who pass away, from the hospital to their eternal resting place.
And no doctors or staff. Yes. There are several outstanding individuals who are not yet tired or burnt out and not rushing off to their private clinics. Yes, Dr. Peter is all dedication and professionalism. But where are the other Peters? Where are they?
I have been in Kiboga several times. But this time the visit hit me hard – and Gal and Tamar and Shneior and Clara and Yoav. Like a whirling sword before the gates.
Yes, there are hundreds, perhaps thousands, of hospitals like this one in Africa. But Kiboga is ours. Our "Israeli medicine on the equator". For seven years, we have been entering and departing its gates.
And the same sober stabs of compassion that you radiate. The same big love, and dedication, and true professionalism of the graduates of Israeli medical schools to some extent balance the shocking reality that becomes almost banal after several hours.

Kiboga is not just your hospital. With thousands and thousands of patients who enter and leave, overflowing its dilapidated confines.
Kiboga belongs to every person who reads this email, who can sense your experience in the heart of darkness. Each day anew.
A hospital that obligates each and every one of us to do something. To help one ward, one unit, one baby to survive.
To make a decision that we are helping. Because this is why we are there. To appeal to friends, parents, family.
There is no maybe. One can simply not continue to hide behind that callous, foolish, evasive saying, "The poor of our city come first".
You – all of us – are people, first of all.
And there, in Kiboga, a child lies ill. Without food. Without water. Without bedding. Without oxygen. With medicine on the installment plan. And with him are you – Reut, Eitan, Ronen, and Yahel, with your big love, dedication, and professionalism.
Bless you.
I call upon you, all those reading this email. Join up, take part, contribute long term. It's not the lives of other people. It's your life. Of our friends, of your friends, meeting the dawn with all their pain and courage, a new dawn.

Best Regards,

Mike
[Mike Niftali, PhD, founding chair of Brit Olam]