MARIAL LOU OPD/IPD PROGRAM
ANNUAL REPORT 2011

To LA GOCCIA

"One drop for all"

ST. FRANCESCO D'ASSISI HOSPITAL

Reporting Period: January 2011 – December 2011

Presented by: Dr. CALLIXTE MINANI
AAA Medical Director

ACKNOWLEDGEMENT

The Health Services rendered at St Francesco D`Assisi Hospital, Marial-Lou could not have been possible without the invaluable support of LA GOCCIA that provided for all the salaries both for local and expatriate staff working at the Hospital. Only sustaining the staff, in fact, patients could get access to essential and vital Health Services.
AAA looks forward to the continued support in 2012.
Arkangelo Ali Associations (AAA) would also like to extend sincere gratitude to all who contributed towards the attainment of goals in the Programs. Also much appreciation goes to the members of staff who have been providing health services tirelessly, Dr.Callixte Minani and Mrs. Natalina Sala for their technical support. Through these services many lives were saved and given a second chance.

ACRONYMS

AAA	Arkangelo Ali Association
ANC	Antenatal Clinic
CCM	Comitato Collaborazione Medica
D&C	Dilatation and curettage
EPI	Expanded Program on immunization
GF	Global Fund
IPD	In-Patient Department
M&E	Monitoring and Evaluation
MCH	Maternal & Child Health
NIDS	National Immunization Days
OPD	Out-patient Department
OVC	Orphans and Vulnerable Children
PAL	Persons Affected by Leprosy
PHC	Primary Health Care
PHCC	Primary Health Care Centre
RN	Registered Nurse
RPR	Rapid Plasma Reagin
RVF	Recto Vaginal Fistula
SOH	Sign of Hope
TBA	Traditional Birth Attendant
VVF	Vesicovaginal Fistula

EXECUTIVE SUMMARY

The goal of the Primary Health Care Program run at St. Francesco D'Assisi Hospital is to provide medical Services to improve the health status of the community in Marial Lou and its surrounding areas within the target population, so as to reduce human suffering and enhance human dignity.

This was achieved through the work of local and expatriate Health workers whose salaries were sustained by LA GOCCIA. Providing a rural Hospital with the proper number of well trained staff has to be seen as an essential part of all Health Programs as without this nothing could have been done for the local community. The continuous job training, the possibility of sharing work experience with expatriate medical personnel and volunteers coming from abroad, build up the capacity of the local human resources preparing them for the time when they will be fully responsible for the Facility and for running all the Health Services in the New Sudan, without being supported by the NGOs and the International Community Organisations.

Through the work of local and expatriate staffs, the Program proved to be very beneficial to the local community in 2011 as:

- **14,379** patients were treated at OPD (3478 more than in 2010);
- The staff benefitted from training on job and more formal training courses**: 8** nurse assistants completed their training and **9** more are still on training; **3** lab technician assistants are on training; **8** staffs were trained on SAM Management; **1** anaesthesiologist assistant is still on training);
- More than **1,000** people per month in Marial Lou and surrounding area benefitted from the health education given at the Facility. Nutrition was always among the topics covered by Health Education;
- The number of women visiting the Hospital for **ANC** service increased: in 2010 ANC 1st visits were 1629 while in 2011 they

were 2457. ANC follow up visits too increased in number: in 2010 they were 1083, in 2011 they were 1385. Women were always addressed to other EPI Services for their own TT immunizations and for the children ones;

- A reduced burden of Syphilis and Brucellosis among the community was registered, at least among a selected population of patients (women attending ANC Service);
- Nutrition Program too was successful, as the quality indicator for the program improved if compared to the ones of 2010;
- The cure rate of the beneficiaries of the Services offered at the Facility increased in 2011: e.g. among the patients admitted at the IPD (for which we can assess the outcome[1]), the proportion of the ones that exited as cured in 2010 was **90 %** of the total number of exits, while in 2011 it was **94 %**;
- Hospital Buildings (Paediatric Ward and Living Compound) were rehabilitated and water and sanitation system was improved.

The Hospital is a very busy facility as it is covering a huge area, but the Staff is very committed to serve South Sudanese population, offering good quality Services, free of charge, all over the year.

LA GOCCIA is funding OPD/IPD Programs providing for all the salaries of both local and expatriate staff. None of the Programs run at the Facility would have run without its vital support. This makes LA GOCCIA one of the most important benefactors of the Hospital.
AAA is grateful to LA GOCCIA for its cooperation in 2011 and in the previous years, and hopes for continued support in 2012 too.

[1] About patients seen at the OPD, the Facility only registers diagnosis and treatment data, as patients are given drugs and are sent home. This is why it is not possible to assess the outcome of patients for OPD department.

TABLE OF CONTENTS

1.0. Introduction 8

2.0. Goals and Objectives of the Program 9

3.0. Hospital Departments' Activities in 2011 10

3.1. Out-patient Department 10

3.2. Antenatal Clinic 16

3.3. Pharmacy 19

3.4. Laboratory 19

3.5. In-patient Department 21

3.5.1. Paediatric Ward and Nutrition Program Services 25
3.5.2. Operation Theatre 29
3.5.2.1. Gun Shot Casualties 32
3.5.3. Obstetrics & Gynaecology Ward 34

4.0.Other Hospital Activities 38

4.1. Capacity Building 38
4.2. Health Education 39
4.3. Ward Rounds 39
4.4. Hospital Hygiene 40
4.5. Hospital Meetings 40

5.0. Staff 41

6.0. Supporting Donors 41

7.0. Hospital Buildings' Rehabilitation 41

7.0. Visitors 42

8.0.Constraints 42

9.0. Recommendations 43

10.0.Conclusions 44

1.0. INTRODUCTION

St. Francesco D'Assisi Hospital is a rural based Hospital located in Tonj North County, Warrap State. The State comprises of seven Counties namely: Gogrial West, Gogrial East, Twic, Abyei, Tonj South and Tonj North. It is bordered by South Kordofan in the North, Western Bahr el Ghazal in the west, Western Equatoria and Lakes State in the south and Unity State in the east.

Warrap state has an estimated population of 2,449,630, with Marial Lou payam having 29,957 people (NIDS statistics 2009). The County comprises of ten payams, namely; Marial Lou (where the Hospital is located), Akop, Albek, Aliek, Awul, Ruabet, Kirik, Pagol, Warrap town and Amanor. The payams are strategically divided to provide access to the major rivers and tributaries that transverse the state. The state also has one of the largest cattle herds in southern Sudan.

The Hospital is quite beneficial to the community as it offers free medical services to the community, being a not-for-profit project. The Hospital provides Preventive, Curative, Surgical, Nutrition, Maternal/Child Health and Laboratory Services. It is one of the only two existing Hospitals in Warrap State. It also serves as a referral Hospital for Warrap State and the surrounding areas. Other NGOs assist in bringing patients to the Hospital from remote areas, collecting them during their mobile outreach activities.

Majority of the people in the area live below the poverty line and depend on cattle keeping as main source of income. This has greatly contributed to wide spread cases of cattle rustling, resulting in an influx of patients with gunshot wounds coming to the Hospital.

In 2011 the socio–economic situation of the local community was not good. The population normally depends on cattle, which were raided on and off, sometimes leaving families without any. Some local people are trying to introduce farming but in 2011 the output was very small. One of the reasons for the very poor harvesting was that people started

eating the crops before crops were ripe, so that when it was harvesting time the food was almost finished.

The cattle raiding that took place during the year was followed by inter clan clashes that went on up to September/October, when the communities of Marial Lou and neighborhood were disarmed by local authorities. Since they were disarmed, security has improved a lot.

2.0. GOALS & OBJECTIVES

2.1. Goal

The main goal of the Program is to provide medical Services to improve the health status of the community in Marial Lou and its surrounding areas within the target population so as to reduce human suffering and enhance human dignity.

2. 2. Specific Objectives

In order to achieve the main goal and the specific objectives for all the Programs run it is necessary to maintain and improve the Human Resources working at the Facility. This means that local and expatriate staffs have to be motivated to work for the Program, by the mean of right salaries and continuous capacity building activities.

Through their work it is possible to achieve the following:

- Maintaining quality health care for all patients through the provision of quality and sustainable drugs and other medical supplies;
- Increase curative and preventive activities, including immunization and ANC Services, at the Facility

- Providing high quality care for acute and complicated malnutrition among children (Nutrition Program);
- Improve Maternal and Child Health care related activities at the Hospital;
- Promote health awareness through Health Education
- Ensure medication stock in the Hospital especially those for common ailments and diseases
- Provide routine structural maintenance and repairs
- Promote capacity building of staff not only by training on new aspects and developments but also giving refresher courses to enhance skills
- To equip the Hospital for the Therapeutic and Supplementary Feeding Centers:
- To admit and feed at least 250 malnourished children
- 100% of beneficiaries have known prevention measures of malnutrition.
- At least 3,000 mothers living around Marial Lou will benefit from awareness creation and health education on Nutrition.

3.0. HOSPITAL DEPARTMENTS ACTIVITIES in 2011

The Hospital comprises of six departments which are run by a team of local and expatriate health personnel:

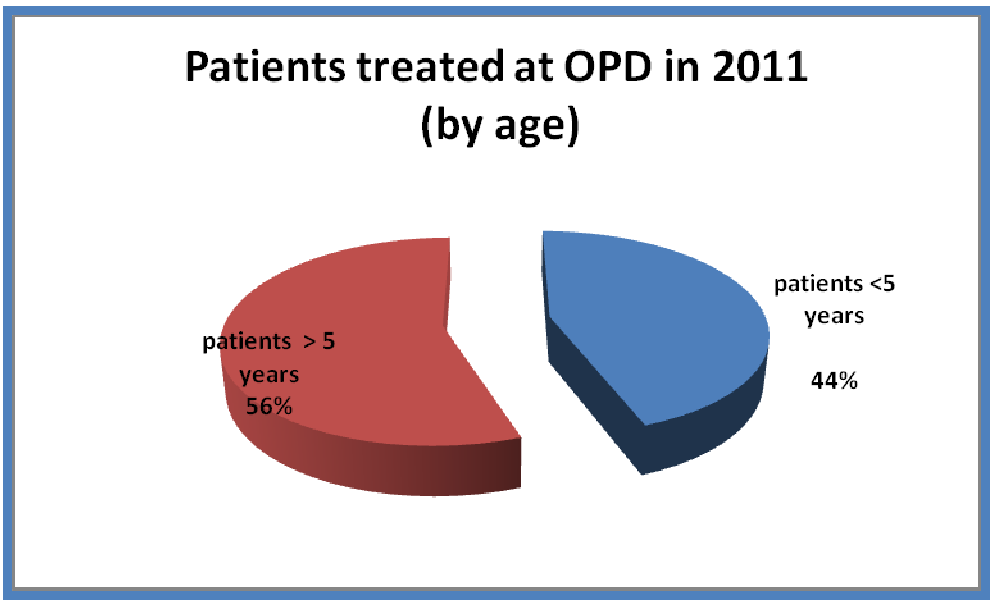
1. Out-Patient Department (OPD)
2. Medical Department
3. Surgical Department
4. Paediatric Department with Nutrition Centres
5. Obstetrics and Gynaecology Department
6. Operation Theatres (main and minor)

3.1. OUT- PATIENT DEPARTMENT

The department was very busy the whole year long. The most common diseases seen at the Department were: malaria, respiratory infections, watery diarrhoea, brucellosis, acute malnutrition. Some few patients were diagnosed with other conditions like typhoid fever, intestinal parasites, burns/trauma etc. The highest number of patients was registered on August and November.
When the dry season set in October, although most part of the community moved to swampy areas in search of green pastures and water, patients registered at OPD remained very many, and this persisted during the following months too.

The department achievements in 2011 were:

- Total number of patients treated at the OPD: **14,379**
- Number of patients <5years: **6,388**
- Number of patients >5years: **7,991**
- Average number of patients seen per day: **39**

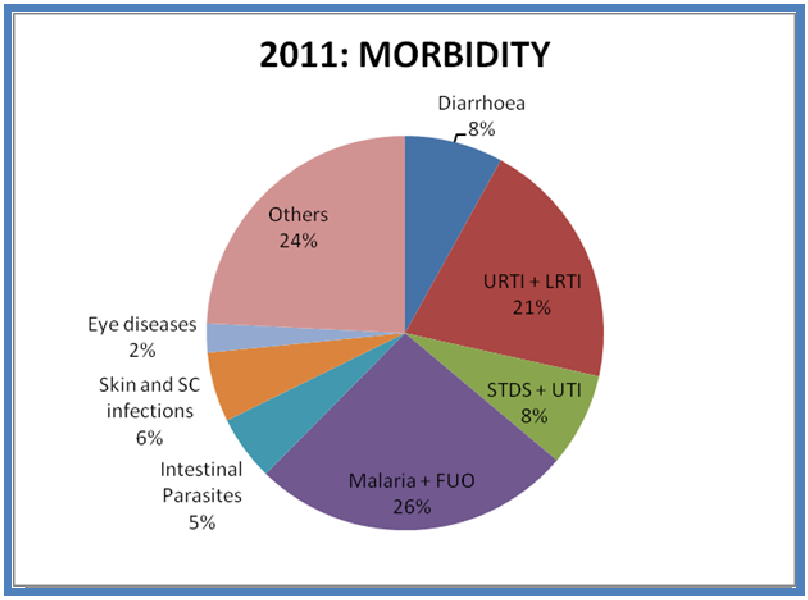


Most of the patients below 5 years were suffering from severe malaria and pneumonia. Most of them were admitted at IPD for being treated with intra vein and intra muscular drugs; the stable ones were given oral

treatment and were sent home. Mothers were told to come back after few days for being checked and/or for further treatment.
The most represented illnesses at the OPD rated as follows: malaria rated at **3767,** respiratory tract infections at **2951,** diarrhoea at **1150,** and STI and genitourinary tract infections at **1099**.

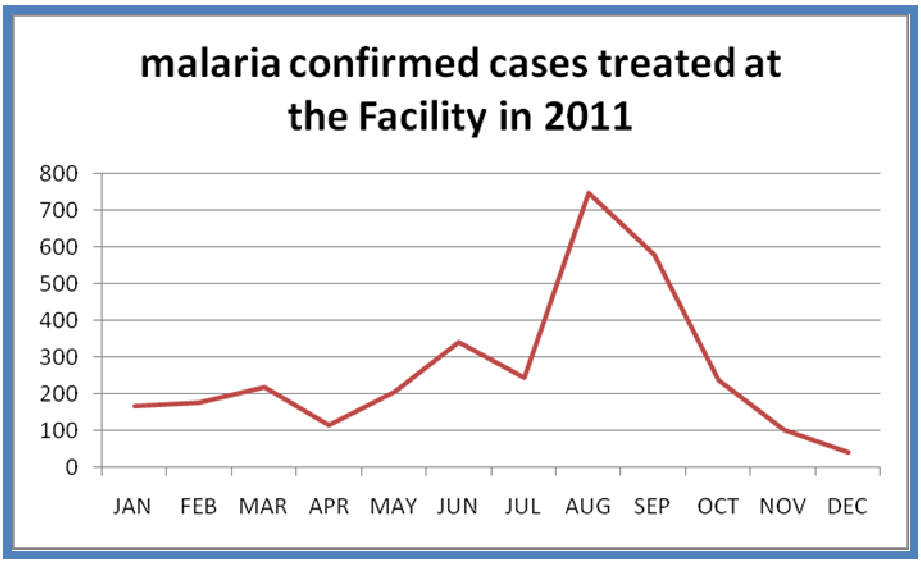
The table and chart below show the most common diseases seen at the OPD during the year.

MORBIDITY	< 5 years			> 5 years			TOTAL
	Male	Female	Total	Male	Female	Total	
Diarrhoea	519	417	**936**	106	108	**214**	1150
URTI + LRTI	1170	998	**2168**	361	422	**783**	2951
STDS + UTI	38	19	**57**	380	662	**1042**	1099
Malaria + FUO	865	793	**1658**	928	1181	**2109**	3767
Intestinal Parasites	140	144	**284**	221	262	**483**	767
Skin and SC infections	189	159	**348**	201	273	**474**	822
Eye diseases	100	89	**189**	68	84	**152**	341
Others	405	343	**748**	1270	1464	**2734**	3482
TOTAL	**3426**	**2962**	**6388**	**3535**	**4456**	**7991**	**14379**

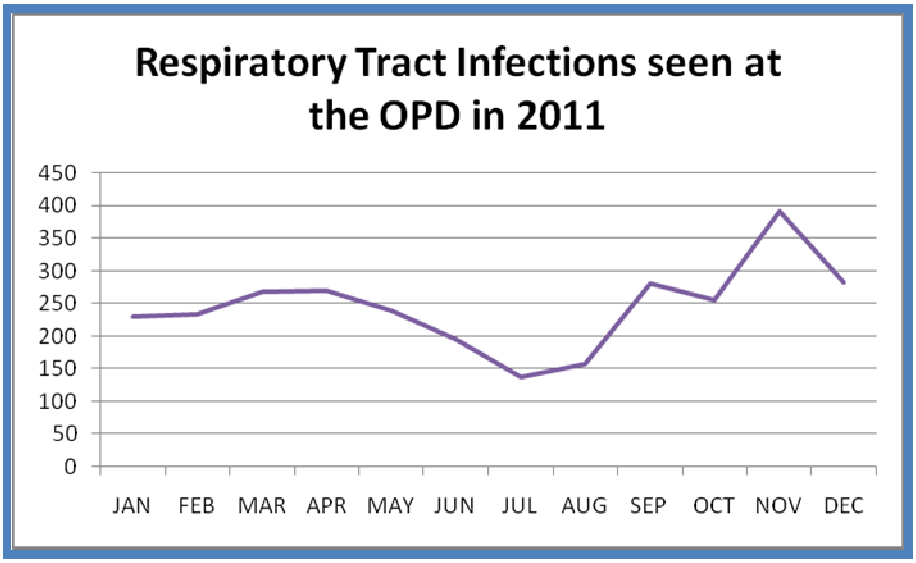


Malaria cases were mostly represented by patients having blood smear positive (3112) and the rest (655) clinically diagnosed and treated. The number of Malaria cases increased between the months of May and

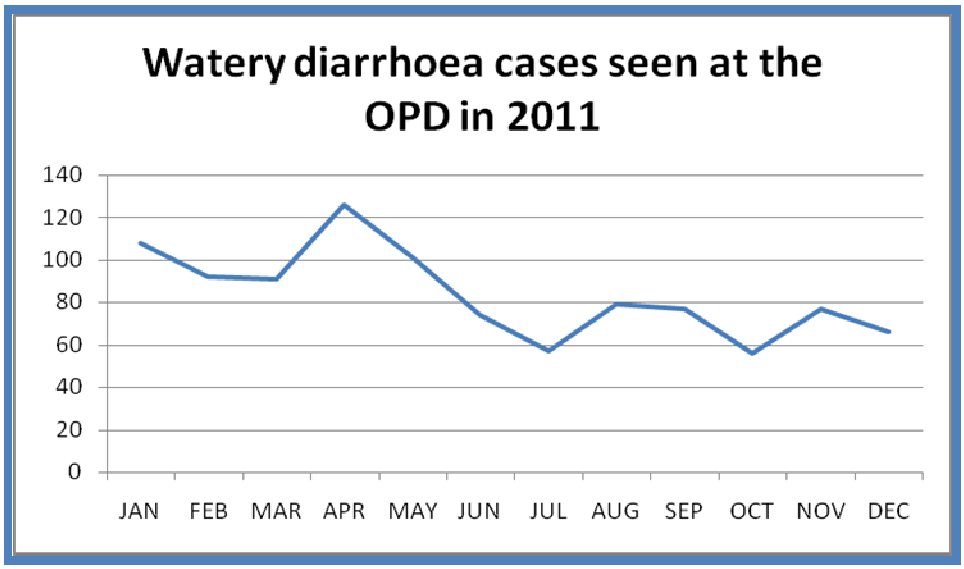
October due to heavy rainfall which created a conductive environment for the breeding of mosquitoes and spread of the disease.



The number of cases of respiratory tract infections (LRTI and URTI) was also high. This can be attributed to the poor living conditions of the local community, especially of those who live in cattle camps where the hygiene is poor: people sleep in the same place with the cattle and the goats, under shelters insufficient to protect them from the rain and the wind. During rainy season the number of infections increased due to the influx of cattle keepers to Marial Lou area.



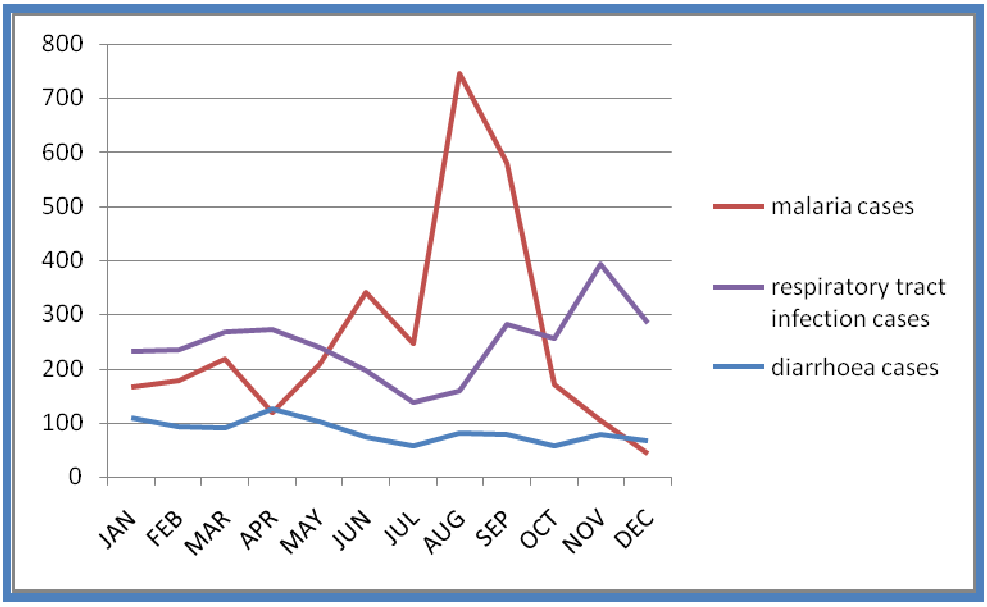
Watery diarrhoea, equally consequent to poor hygienic practices, was also high. A main problem in the area of Marial Lou is the lack of bore holes or other improved drinking water. This constitute a major issue for the community that is then forced to use stagnant water collected from pools for domestic use, for cooking, drinking, bathing and also for the animals' needs. This water is always dirty and contaminated, especially during the dry season. Only a low percentage of the people in the County have access to improved drinking water. Even if hand pumps had been established in some villages, generally the community can only access unimproved drinking water because the hand pumps are not yet properly distributed on the whole area and they are still insufficient in number if compared to the population density. The GoSS and some NGOs and international organization (e.g. UNICEF) are supporting the construction of bore holes in the Region, so that in the future it will be possible for the local community to avoid water borne diseases and other conditions due to use of unimproved drinking water.



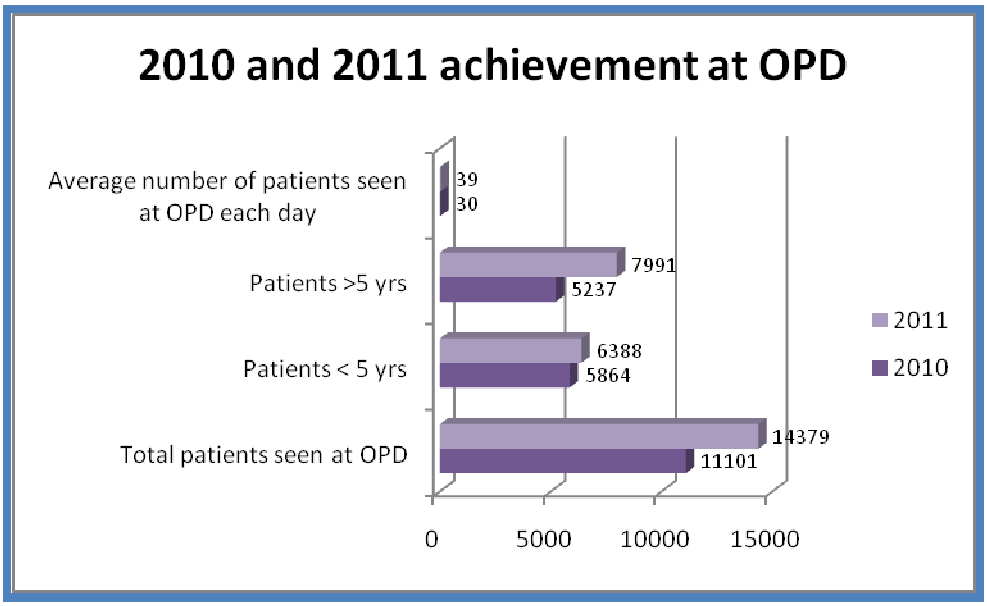
Despite continuous Health Education the number of brucellosis cases, especially in pregnant mothers, was still high. The Hospital was supplied with enough drugs to cater for them. The disease is very common because of cultural beliefs that prevent people from boiling milk and cook properly the meat of cows. As a consequence is very difficult to eradicate it among Dinka's community. Even though, the number of cases decreased if compared to 2010 data (**365** cases were

reported and treated in 2010 while **118** cases were reported and treated in 2011).

Epidemiological Report 2011: OPD Monthly Statistics	
January	1011
February	1419
March	1293
April	1285
May	1178
June	1069
July	792
August	1473
September	1295
October	1017
November	1449
December	1098
Total	**14379**



As you can see in the above charts, the staff working at the out-patients department was always very busy, treating patients during all months of 2011, as when malaria cases were not many, other main diseases cases increased in number.



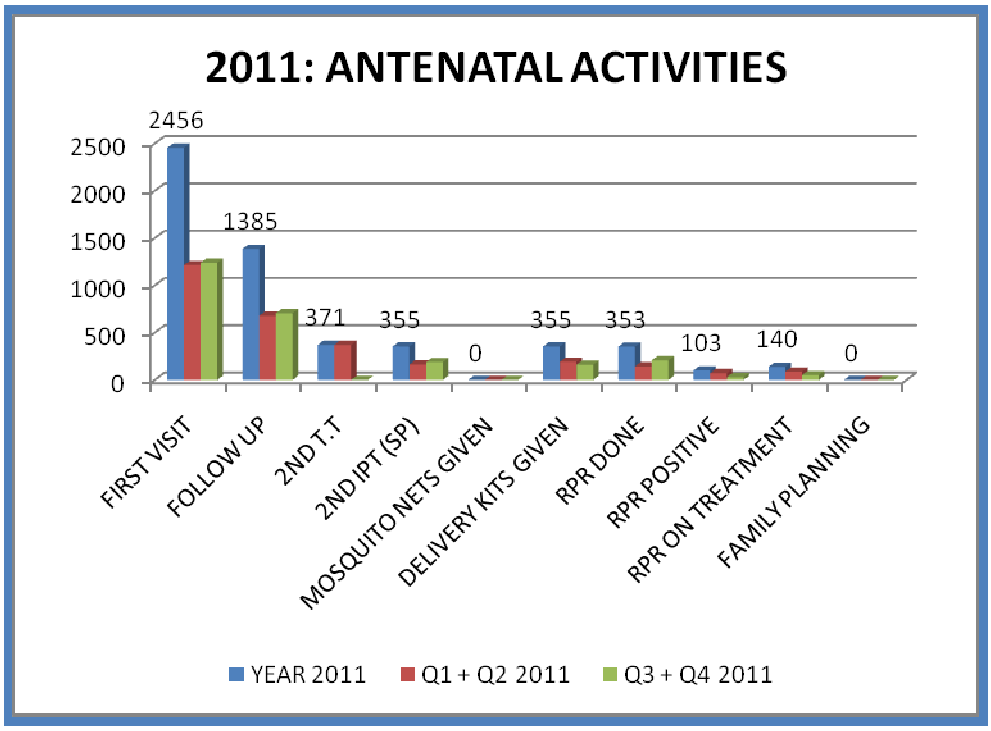
The number of patients treated at the OPD in 2011 increased if compared with data of 2010.

3.2. ANTENATAL CLINIC (ANC)

The following Health Services were offered at the maternal health clinic in 2011:

- Physical examination in order to asses mother and child conditions
- Health education
- Immunisation of Pregnant Women with Tetanus Toxoid to avoid maternal and child tetanus sickness/death
- Issuing of a delivery kit to the Pregnant mothers, to be used in the case they decided not to deliver at the Facility
- Issuing of mosquito nets to Pregnant Women so to the reduce malaria cases in pregnancy and in under five children
- STI consultation with routine screening for Syphilis and urinalysis test
- Family planning advice and consultation

Antenatal Activities achievements for the Year 2011 were as follows:



ACTIVITIES	jan	feb	march	apr	may	june	july	aug	sept	oct	nov	dec	2011
1st visit	144	191	250	241	221	168	158	180	168	151	377	207	2456
follow up visit	74	92	144	132	115	122	120	152	117	105	110	102	1385
2nd T.T	25	45	56	60	95	90	0	0	0	0	0	0	371
2nd IPT	20	12	35	52	21	25	40	49	32	21	37	11	355
mosquito nets	0	0	0	0	0	0	0	0	0	0	0	0	0
delivery kits	27	60	24	35	25	22	32	32	32	24	23	19	355
RPR done	0	0	79	38	27	0	0	39	37	87	38	8	353
RPR positive	0	40	29	2	2	0	0	23	2	3	0	2	103
RPR on	16	25	20	12	9	6	6	25	6	10	3	2	140
Family Planning	0	0	0	0	0	0	0	0	0	0	0	0	0

In 2011 the number of mothers who came for ANC Service was high. Patients had routine examinations and check up and treatment was given depending on the result of tests. Mothers were given Health education and they were encouraged to deliver at the Hospital so to avoid complications. Many delivery kits were distributed to be used at home, in case they decided not to come to the Hospital for delivering: this helped them to avoid infections like neonatal and maternal tetanus.
All mothers were screened for HIV, Hepatitis, urinalysis, blood group; other tests were done when needed.
Routine drugs, like Folic Acid and Ferrous Sulphate (for reducing the cases of Anemia among mothers), and Fansidar (malaria prophylaxis) were provided to all mothers attending ANC Service.

The number of mothers with RPR positive (Syphilis Test) had reduced (compared to 2010 data), due to continuous Health Education and treatment given to the Community.

Mothers/Pregnant women were provided with all the possible assistance, exception for:

- Treated Mosquito bed nets: providing mothers and pregnant women with mosquito bed nets is very important to reduce the incidence of malaria cases. It is demonstrated that, insecticide-treated mosquito bed nets (ITNs)[2] are more effective than the

[2] "Insecticide-treated bed nets (ITNs) are a form of personal protection that has been shown to reduce malaria illness, severe disease and death due to malaria in endemic regions. In community-

untreated ones. Among the treated nets, Long lasting Insecticide-treated Nets (LLINs) are considered by WHO the best to be provided.[3] Unfortunately the Clinic could not get a budget so to supply this important health intervention.

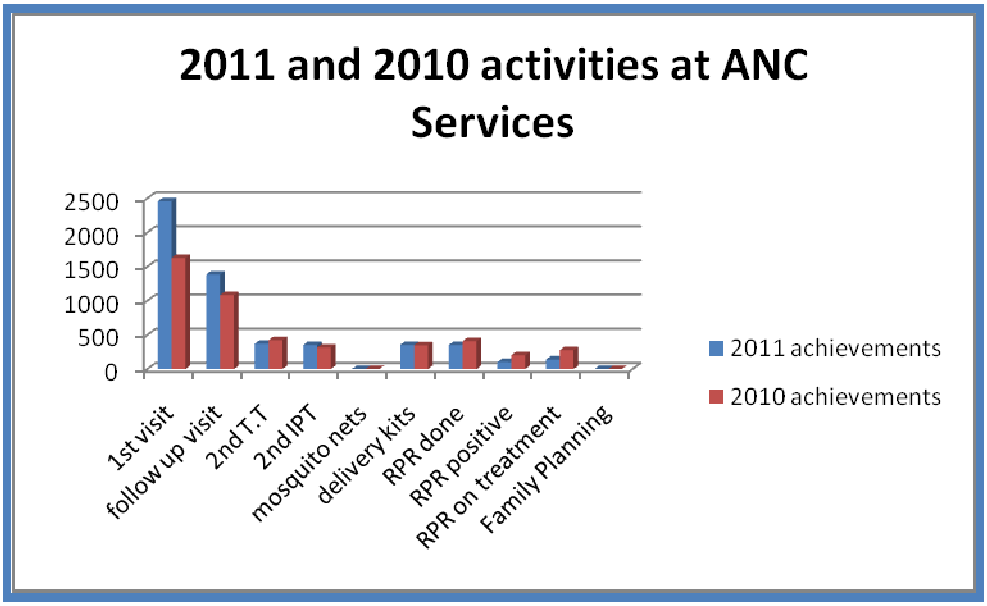
- Family Planning Education: it could not be given, because the culture of the local society is not in line with it and does not accept it.

Immunization of mothers and children was not done at the Facility but the staff working at ANC Service always referred pregnant women to other Centers for Immunization. Sadly sometimes mothers finished the nine months of pregnancy without being vaccinated with Tetanus Toxoid.[4]

wide trials in several African settings, ITNs have been shown to reduce the death of children under 5 years from all causes by about 20%."
CDC, http://www.cdc.gov/malaria/malaria_worldwide/reduction/itn.html

[3] "Previously, nets had to be retreated every 6-12 months, more frequently if the nets were washed. Nets were retreated by simply dipping them in a mixture of water and insecticide and allowing them to dry in a shady place. The need for frequent retreatment was a major barrier to widespread use of ITNs in endemic countries. The additional cost of the insecticide and the lack of understanding of its importance resulted in very low retreatment rates in most African countries. More recently, several companies have developed long-lasting insecticide-treated nets (LLINs) that maintain effective levels of insecticide for at least 3 years. The WHO Pesticide Evaluation Scheme (WHOPES) has given either full or interm approval to 12 of these LLINs for use in the prevention of malaria." CDC, http://www.cdc.gov/malaria/malaria_worldwide/reduction/itn.html

[4] See footnote n. 7, p.45. Some mothers and children did not receive the proper immunization as per GoSS schedule, even if they were always addressed by the staff working at the Hospital to the PHCU/PHCC where EPI program is run. This is mainly due to long distances to be covered and/or lack of means of transport. At the moment, in Marial Lou area CCM Italy is running this kind of Program. In all Regions of South Sudan EPI activities are coordinated in order to avoid some locations to be provided of more than one vaccination centre and the others remaining completely lacking the service. Unfortunately some Regions' extension is still too big and/or the environment is too bushy for the Service to reach all the remote places where the population is living. Marial Lou represents one of these cases. The Hospital Director already requested the GoSS –MoH to be added to the facilities running Immunization Program, but according to the office coordinating the Project, CCM-Italy activities are already covering the needs in the area.



If you compare 2010 and 2011 ANC data you will see that the number of patients who attended the Service increased, as result of the Health Education provided to the mothers and to the community.

3.3. PHARMACY

This year the Hospital received a good amount of drugs and other medical supplies from SOH, MOH, AAA-Nairobi, UNICEF and WHO-Juba. All the drugs were entered in the Pharmacy inventory. The number of patients who could receive treatment at the Hospital increased, thanks to the larger availability of drugs compared to the previous year.

The main pharmacy was taken care by the expatriate staff who is in charge of recording and controlling all the drugs movements in and out the pharmacy, maintaining a basic stock, sending the inventory reports to the head office and ordering emergency drugs and medical items whenever they were going to be out of stock.
The out-patient Department's pharmacy was managed by the local trained staff, under the supervision of the pharmacist.

Every ward has got a cupboard where drugs are safely kept. This "ward-pharmacy" is managed by the ward in-charge staffs: it is their

responsibility to check the weekly stock and to order what is needed after consultation of and approval by the doctor in charge of the ward (or the Hospital Director). At the end of each month the cupboards were well checked, drugs approaching expiry date were removed and returned to the pharmacy for proper disposal. Drugs not in use too were returned to the pharmacy in order to avoid wastage of drugs.

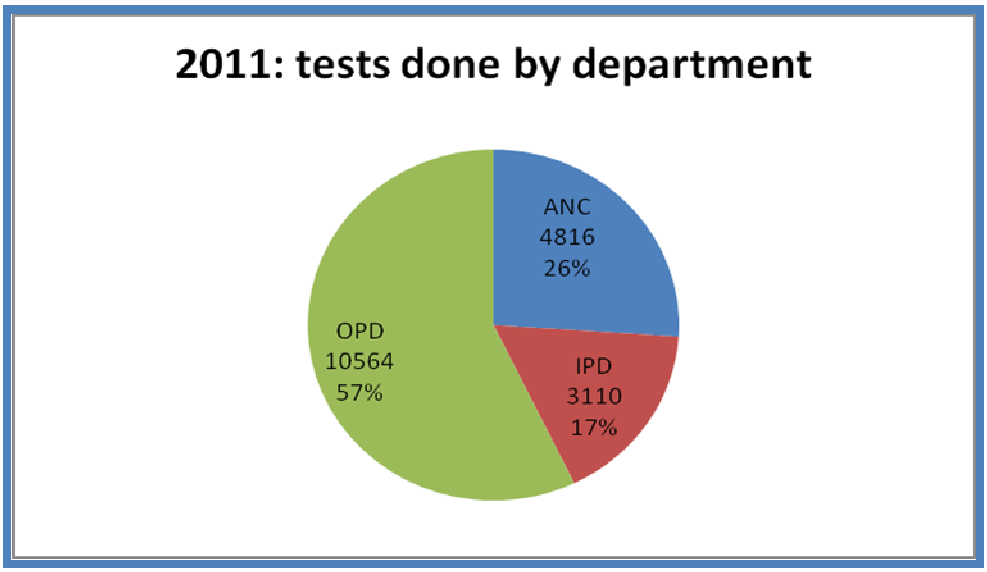
3.4. LABORATORY ACTIVITIES

The laboratory was busy from January till December and many tests were done, supporting doctors in addressing the correct diagnoses and deciding the best treatments for the patients. Blood unit bags were requested to the Laboratory in order to treat anemia, especially for patients undergoing surgical operations. Blood was donated by relatives and the man power to do screenings and compatibility was always available at the Laboratory Service.

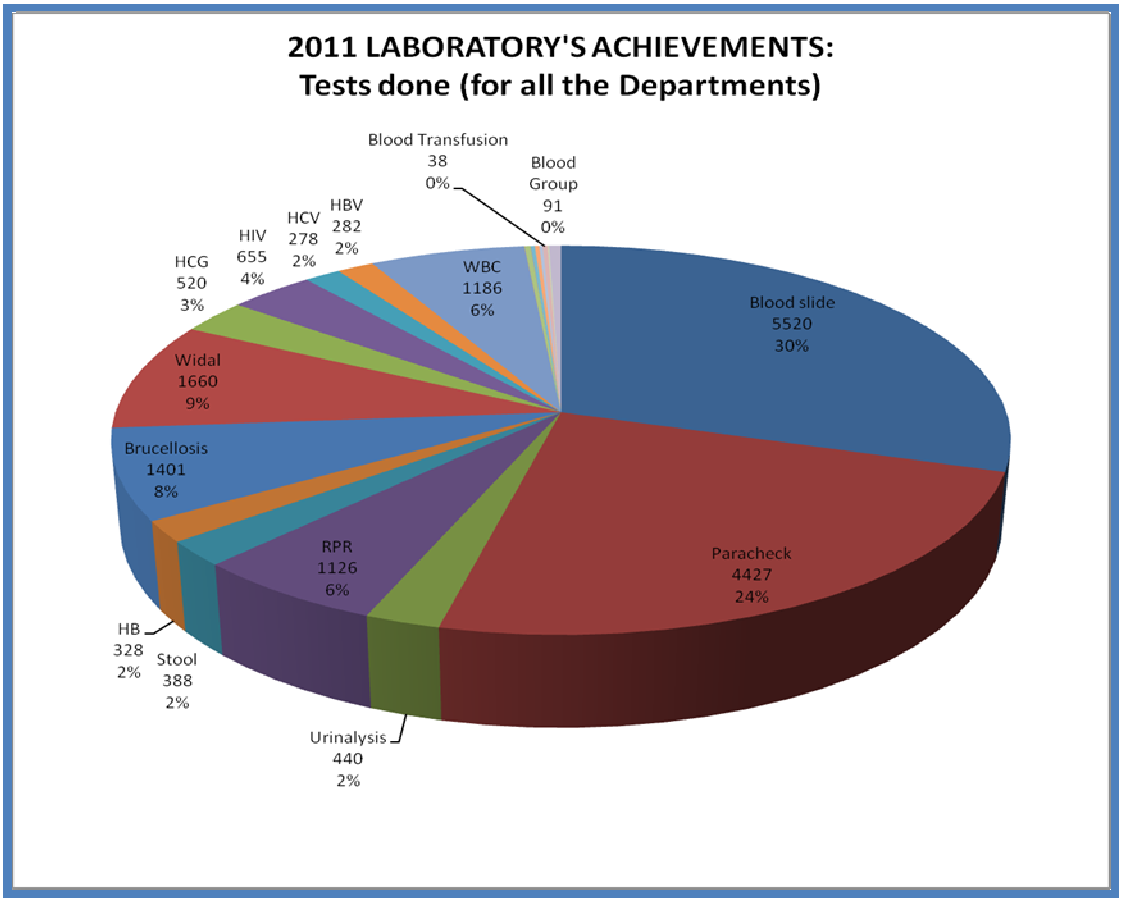
The laboratory Technician used the reagents properly, without wasting, and all tests requested to the Laboratory were done in time. Because of the huge number of tests requested, at the end of November the Facility ran out of the most part of the reagents.
During the year three students had been trained to work at the Laboratory. The Training was successful and the students now are able to do a number of tests on their own and without supervision. The target is to make them able to do all the tests and to work autonomously by the end of 9 months' training (on February 2012).

The table below shows Laboratory Statistics from January till December 2011.

TESTS	ANC	POS	NEG	IPD	POS	NEG	OPD	POS	NEG	TOTAL	POS	NEG
Blood slide	1116	339	777	753	291	462	3651	1408	2243	**5520**	**2038**	**3482**
Paracheck	949	208	741	491	199	292	2987	870	2117	**4427**	**1277**	**3150**
Urinalysis	214	0	0	38	0	0	188	0	11	**440**	**0**	**11**
RPR	471	81	390	81	9	71	574	117	457	**1126**	**207**	**918**
Stool	70	0	0	83	37	0	235	0	0	**388**	**37**	**0**
HB	38	0	0	112	0	0	178	0	108	**328**	**0**	**108**
Brucellosis	310	80	230	407	103	304	684	221	463	**1401**	**404**	**997**
Widal	336	101	235	435	134	301	889	318	571	**1660**	**553**	**1107**
HCG	381	197	184	25	10	15	114	45	69	**520**	**252**	**268**
HIV	452	2	450	131	9	122	72	6	66	**655**	**17**	**638**
HCV	73	1	72	124	4	120	81	6	75	**278**	**11**	**267**
HBV	74	16	58	125	20	105	83	19	64	**282**	**55**	**227**
WBC	280	91	189	184	25	158	722	182	537	**1186**	**298**	**884**
ESR	0	0	0	0	0	0	2	1	0	**2**	**1**	**0**
HVS	9	1	0	3	2	0	34	9	0	**46**	**12**	**0**
Differential count	1	0	1	0	0	0	1	0	1	**2**	**0**	**2**
Leishmania	0	0	0	0	0	0	30	0	20	**30**	**0**	**20**
RF	1	0	1	21	5	12	12	2	10	**34**	**7**	**23**
CRP	0	0	0	12	0	0	14	0	0	**26**	**0**	**0**
Blood Transfusion	0	0	0	38	0	0	0	0	0	**38**	**0**	**0**
Blood Glucose	0	0	0	10	0	0	0	0	0	**10**	**0**	**0**
Blood Group	41	0	0	37	0	0	13	0	0	**91**	**0**	**0**
GRAND TOTAL	**4816**	**1117**	**3328**	**3110**	**848**	**1962**	**10564**	**3204**	**6812**	**18490**	**5169**	**12102**



As you can see from the above table and graph, the most part of tests was done to patients attending OPD, followed by ANC. It has to be reminded that normally patients eventually admitted at the IPD had first been seen, screened and tested at the OPD.



3.5. IN-PATIENT DEPARTMENT

The Hospital has a bed capacity of 42 as shown below:

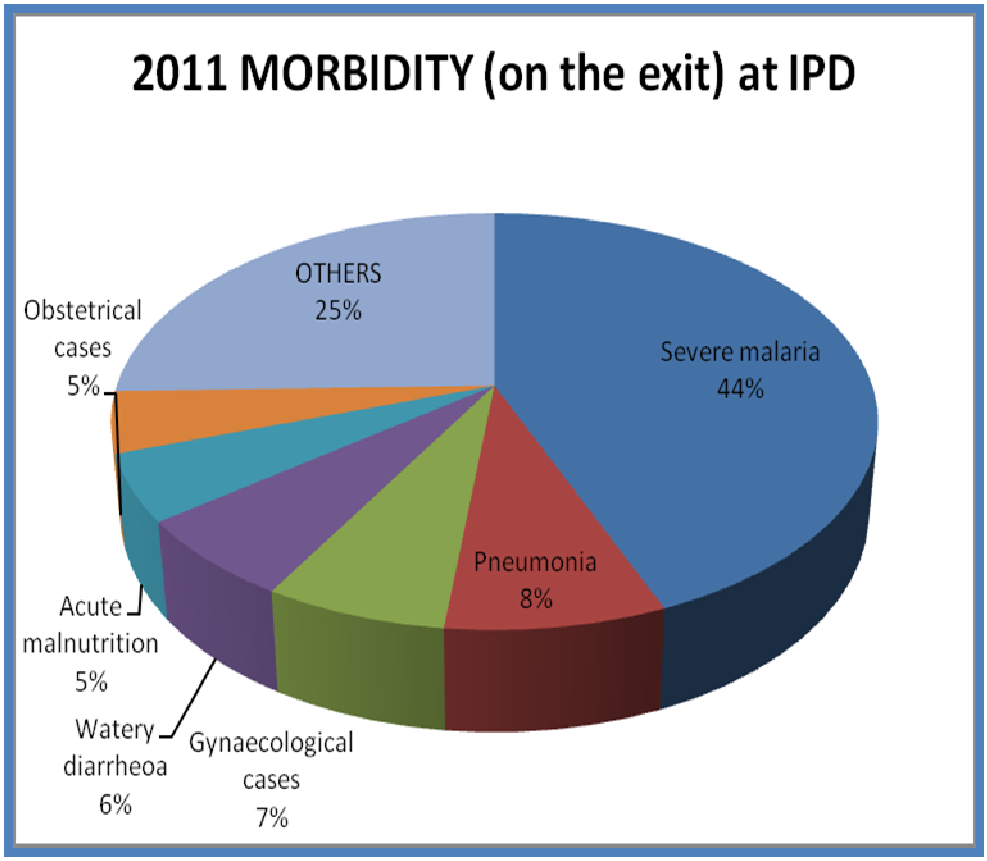
- Adult ward (surgical and medical patients): 14 beds
- Paediatric ward: 16 beds
- Maternity ward: 8 beds
- Isolation ward: 4 beds (2 for paediatric and 2 for Adults)

The Facility was busy from January till December with a total of **4693** patients being admitted suffering from malaria, pneumonia, respiratory tract infections, malnutrition and other diseases. Due to insecurity in the area, several (**57**) patients with gunshot wounds were also admitted. Most of the patients were managed well at the Hospital and only a few, after being stabilized, had to be referred to other Hospitals for further treatment. As in September the community and the neighbors were disarmed, there were no more gunshot wounded patients and the number of surgical and emergency cases significantly reduced.

Some other referrals were done for patients suffering with AIDS, patients with eye cataract, suspect TB patients, etc.

Malaria was the most represented Morbidity at IPD with a total number of **2262** cases of Severe Malaria admitted during 2011, followed by Pneumonia (**410** cases), watery diarrhea (**325** cases) and acute malnutrition (**267** cases).

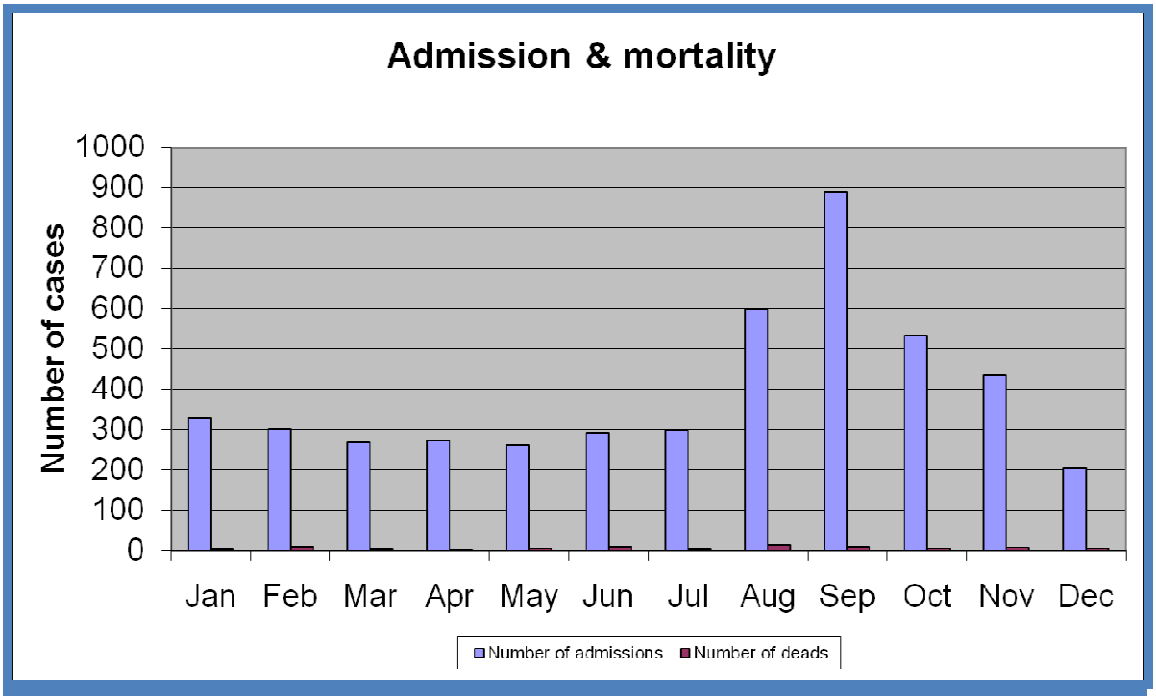
Morbidity most represented in 2011	Number of cases aged < 5 years	Number of cases aged > 5 years
Severe Malaria	1321	941
Pneumonia	386	24
Watery Diarrhea	305	20
Acute malnutrition	263	4



- Total number of patients admitted at the IPD **4693**
- Number of average patients admitted each month **391**
- Number of patients below 5years **2601**
- Number of patients above 5 years **2092**
- Average length of stays: **6 days**

Despite the high number of patients, the Hospital managed to cater for the patients

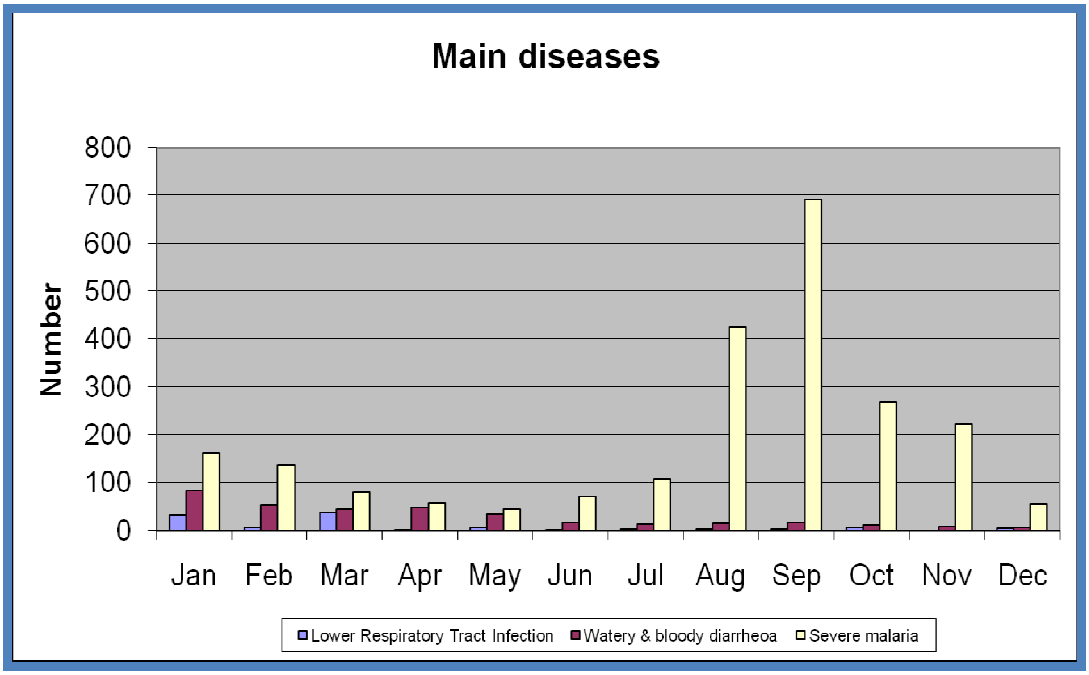
The table below shows the number of admission and the mortality in 2011:



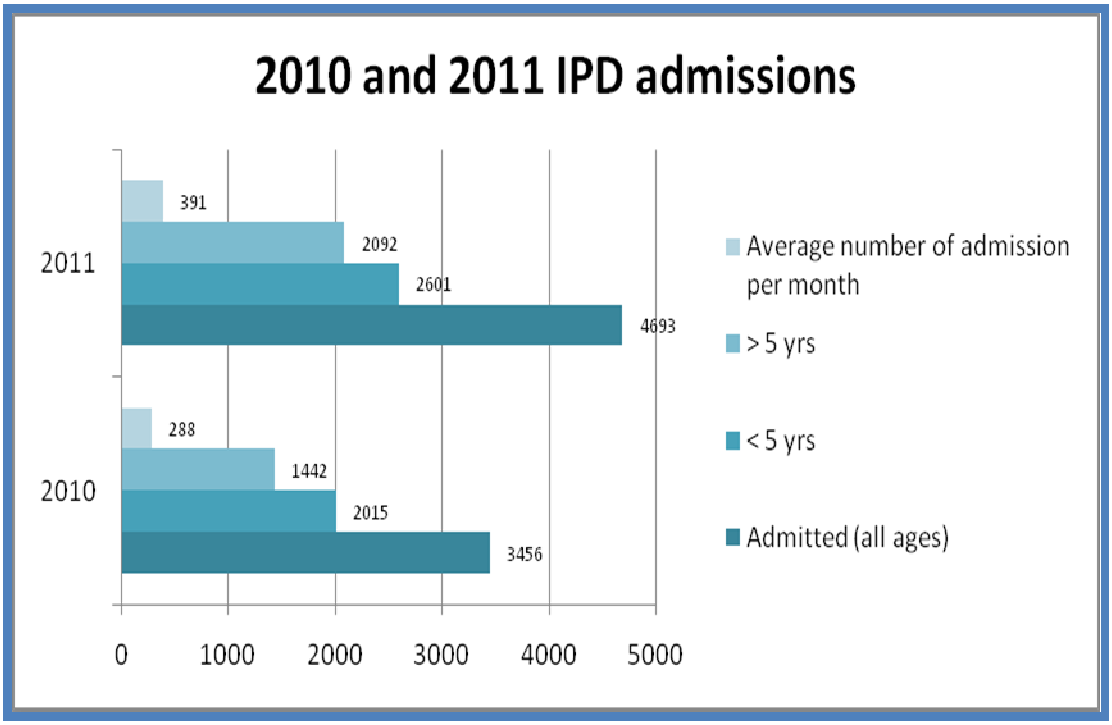
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Number of admissions	329	302	268	274	262	292	301	599	891	535	435	205
Number of deads	5	11	4	2	7	10	5	15	10	6	8	7

It has to be reminded that the deaths at the Hospital (1% of the total number of patients treated during the year) are due to the habit of patients seeking for help only when it is already very late, complications are there and too difficult or impossible to be managed. Educating the local population to seek for help before the illness becomes so serious it is a basic task for all the staffs working at any Department of the Hospital.

The table below shows the number of cases (among all categories of Patients) of LRTI/Pneumonia, Watery/Bloody Diarrhoea and Severe Malaria admitted at the facility during the year.

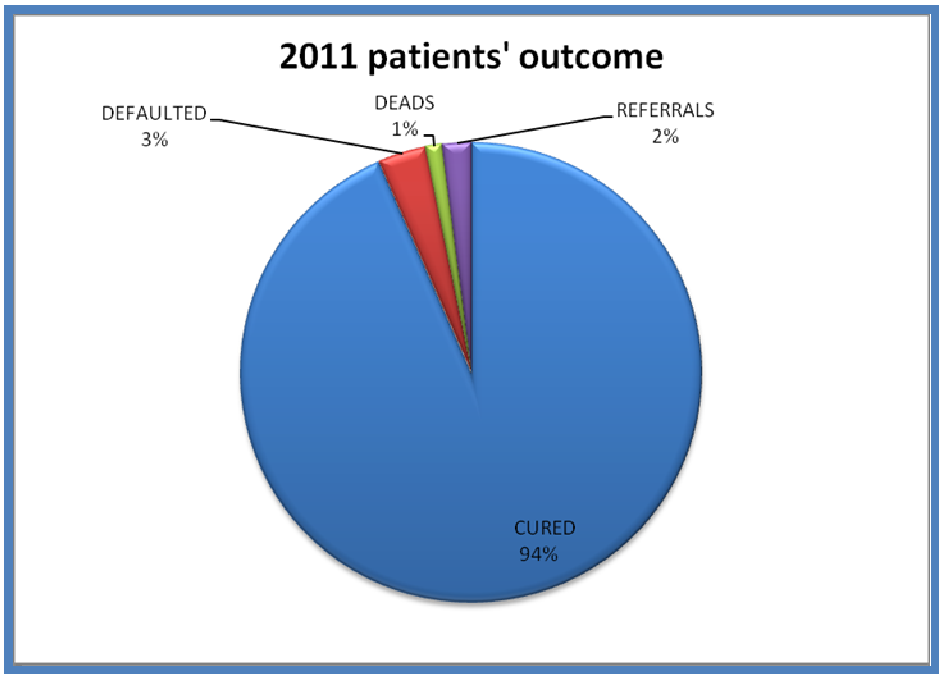


The hightest rate of Malaria Cases (the most represented Morbidity at IPD) was reported during the months of August, September and October (end of the rainy season).



Data related to admissions in 2011 compared to 2010 show an increasing in all the categories: number of admission both in children and in adults, average number of admission per month.

See below a pie chart with IPD patients' outcome on 2011:



3.5. PEDIATRIC WARD and NUTRITION PROGRAM

Pediatric ward was always busy treating children whose most frequent diseases were, as it was shown in the previous chapter, severe malaria, respiratory tract infections, watery diarrhea and acute malnutrition.

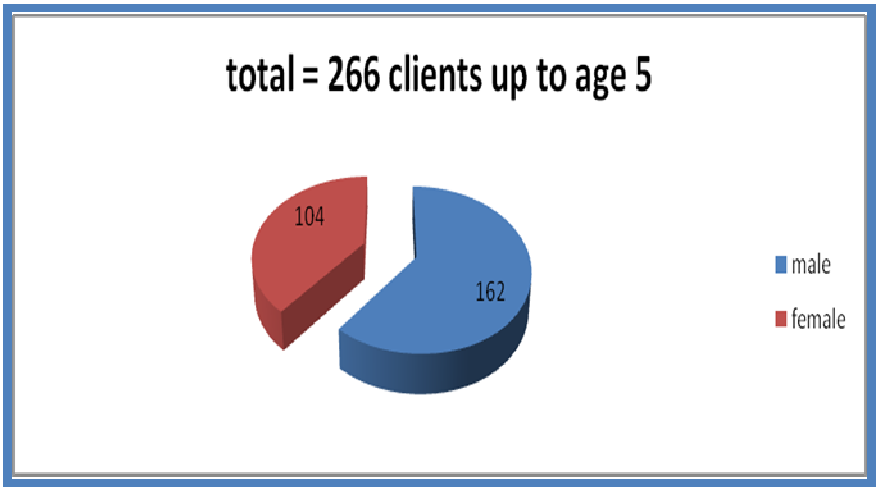
Children below 5 years old were 55.4% of the total cases admitted at the IPD in 2011. But, in order to understand how busy the Ward was, it should be reminded that also children aged above 5 years (counted together with adult cases in Epidemiological Reports) were admitted at Pediatric Ward.

Since 2009, Pediatric ward at Marial Lou Hospital runs also the Nutrition Program supported by SOH. Mission of the Program is to safe guard and to improve the health of severely malnourished children, especially those under the age of 5 years. This is mainly done by providing them with nutritious diet and other basic items.

Nutrition Program proved to be very beneficial to the community of Marial Lou in 2011:

- Total number of malnourished persons who benefited from the Program**: 309**
- Total number of malnourished children 5 years old and below who benefited from the Program**: 266** (266 children up to age five were enrolled in the project and the **cure rate was over 85%,** far beyond the WHO Cure rate of 75%)
- **13** case studies were done and submitted (the planned target was of 8 case studies)
- **10** staffs at St. Francesco D'Assisi Marial Lou Hospital were trained in Management of SAM.
- Over **1000** people were given Nutrition Health Education
- A demonstration garden was established: all necessary farm implements and seeds were received from AAA head office. Tomatoes and "sukuma wiki" and other similar vegetables/greens were successfully cultivated. Foods like onions, carrots and water melon failed.
- The average length of stay of **18** days was within the recommended duration as per WHO nutrition protocols and improved as compared to 2010 length of stay of 21 days.

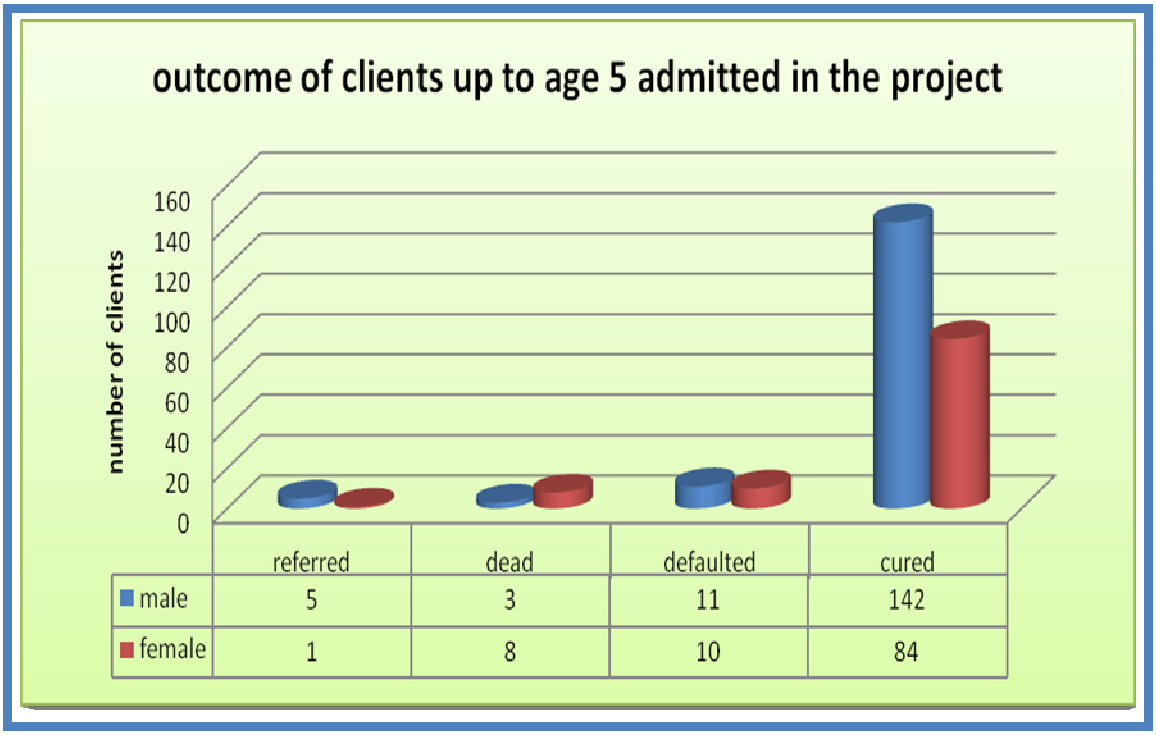
Below is a pie chart showing distribution by gender of patients below 5 years:



39% of the cases were female children, while **61%** were male children.

By the end of 2011, in the main target group of up to age five **264** clients had exited, and only two clients are still in the Program.
Among the exited ones, **226** were cured, **21** escaped, **11** died and **6** were referred for TB treatment to AAA/Comboni TB/Leprosy Hospital in Marial Lou. It is a fact that malnutrition impairs the immunity system and that TB patients are at high risk of developing malnutrition: this connection among the two conditions is so deep that normally TB Programs are comprehensive of anti-malnutrition support and vice-versa, malnourished people, especially if not improving with normal nutrition treatment, are screened or even clinically treated for TB.
AAA is also running a TB/Leprosy Hospital in Marial Lou. The Hospital is a referral centre for Tubercolosis and Leprosy sick patients for the County area. At Comboni Hospital patients are tested, receive medication and nutrition support during the time they are under treatment.

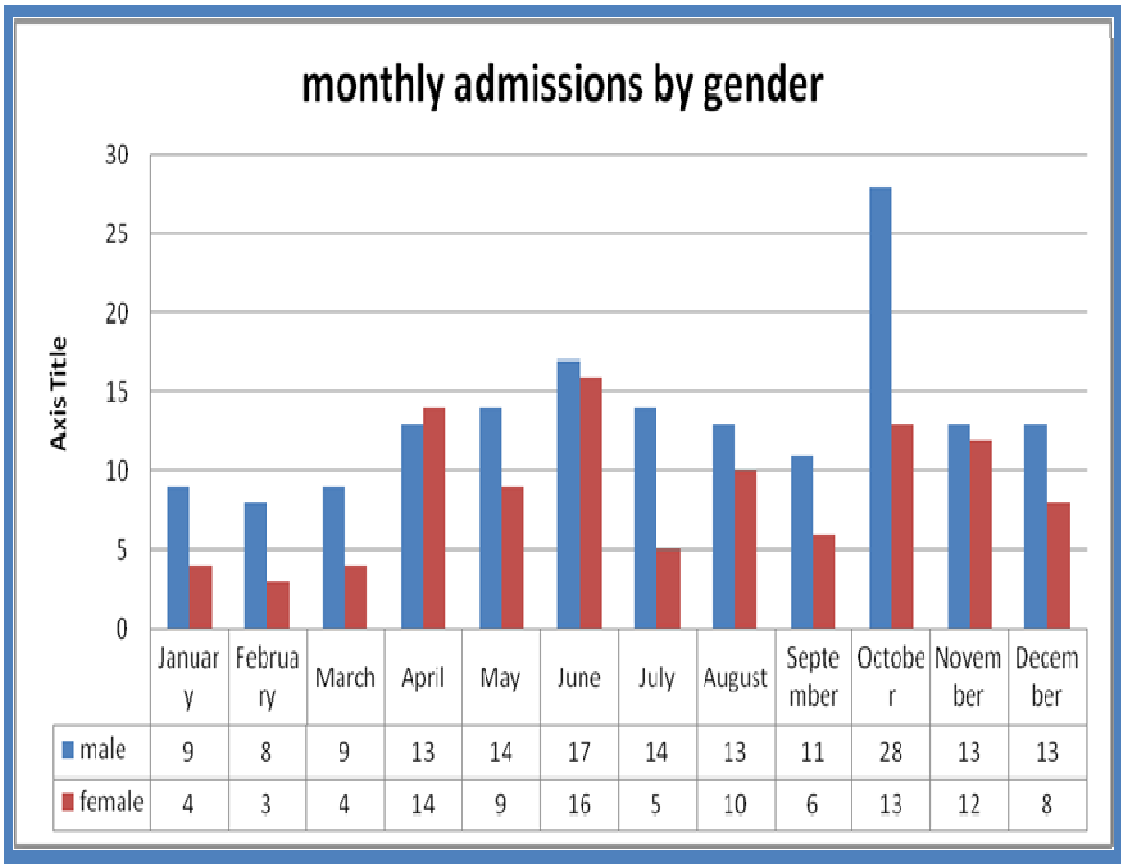
See below a bar chart showing the outcome of clients up to age five enrolled in the Program in 2011:

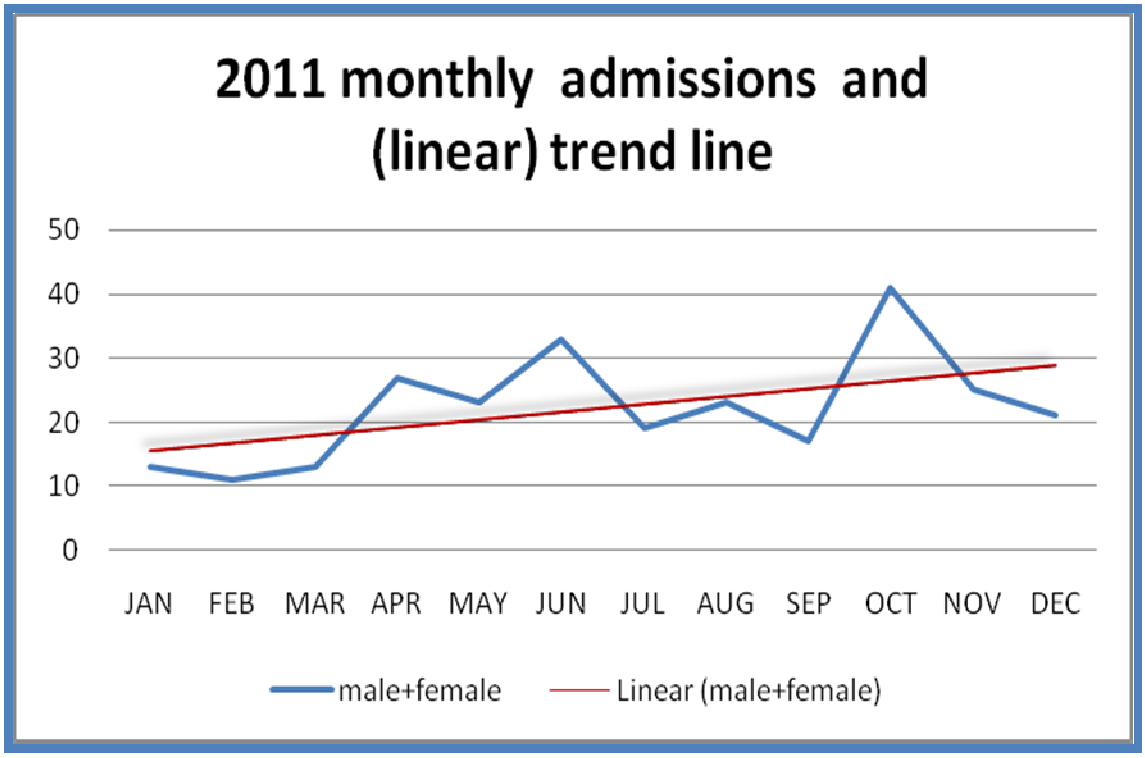


The following table illustrates patients' admission and outcomes per each quarter:

Quarter	new admission	male	female	escaped	discharged	dead	transferred
Q1	37	26	11	6	29	2	0
Q2	83	44	39	8	67	5	3
Q3	59	38	21	5	50	2	2
Q4	87	54	33	2	80	2	1
Total	**266**	**162**	**104**	**21**	**226**	**11**	**6**

See below a bar chart showing monthly admissions by gender and a line chart showing monthly admissions with (linear) trend line:





In 2011 the average number of admission per month was 22.

The highest incidence and prevalence of acute malnutrition occurred:

- In the months of April, May, June and July, as it happened in 2010. This was when the dry season was at its peak (the hanger period was from March-August). Therefore all the food reserves were depleted and gastro intestinal infections occurred, most consequent to lack of water or utilization of dirty unsafe rain water. This meant the little food available was not utilized by the body due to malabsorption.

- In the months of October (the number of admission was 41) and November: probably as a consequence of increasing hunger due to the influx of returnees from Abiey Area[5] and IDPs.

[5] Abiey Region was one of the most disputed areas of Sudan before and at the time of Independence of South Sudan. This is due to the fact that the Region is particularly rich in petrol mines and is located at the border of the two countries. Recently Northern Sudanese Government and South Sudan Government have reached agreement to establish an interim administration of Abiey Region. On July 2011 Northern troops occupied the Region, ceasing away the local community. Ethiopian peacekeeping forces (under United Nation Peacekeeping Mission) have been settled in Abiey in order to avoid violence escalating.

Success in Management of Malnutrition: Madit when admitted in Nutrition Program and after 2 months' treatment

3.7. OPERATION THEATRE (Surgical Activities)

The hospital has Minor and Main theatres that were able to address common surgical conditions. Two days were set aside every week for elective surgery (Mondays and Tuesdays) while emergencies were performed as they arose. Normally operations took place in Major theatre while dressings were performed in Minor theatre.

Most patients were admitted at the Hospital with surgical conditions like hernia, osteomyelitis, acute appendicitis, liver abscess, wounds, abscess, tropical ulcers and many others.

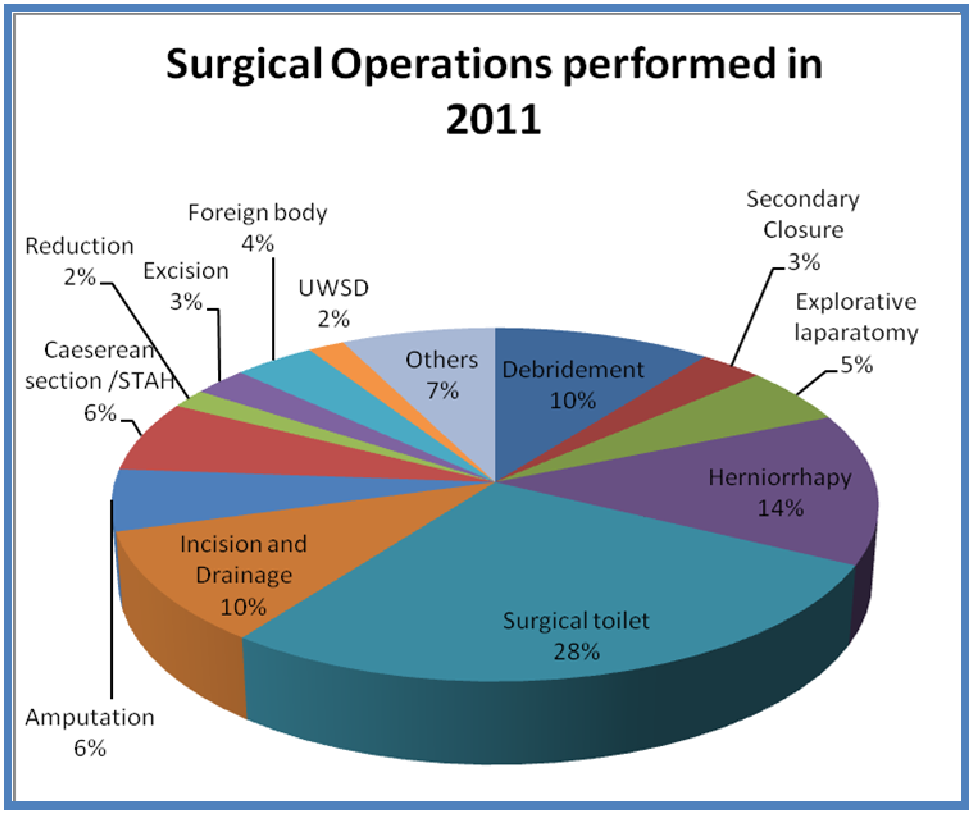
The theatre was well equipped and staff was ready to manage any case in need for surgery. Procedures were all done successfully by the Hospital Director and expatriate voluntary Slovakian Surgeons who alternate in Marial Lou during the year. Surgery was performed under general or local anesthesia, depending on the case: major operations were performed under spinal anesthesia or Ketamine while minor cases were performed under local anesthesia. For most of the patients the prognosis was good.

Cases like removal of retained placenta, D&C, etc. were done in Maternity Ward, in Delivery room, under Ketamine or Pethidine .These procedures were reported as gynecological interventions.
All cases were attended well, and the outcome was good. Some of the patients who underwent surgery defaulted, others are still in the wards continuing with treatment, some were discharged but still coming to the Hospital for dressings and follow up.
Patients with minor surgery were treated as outpatients and given dates for removal of stitches and check up.

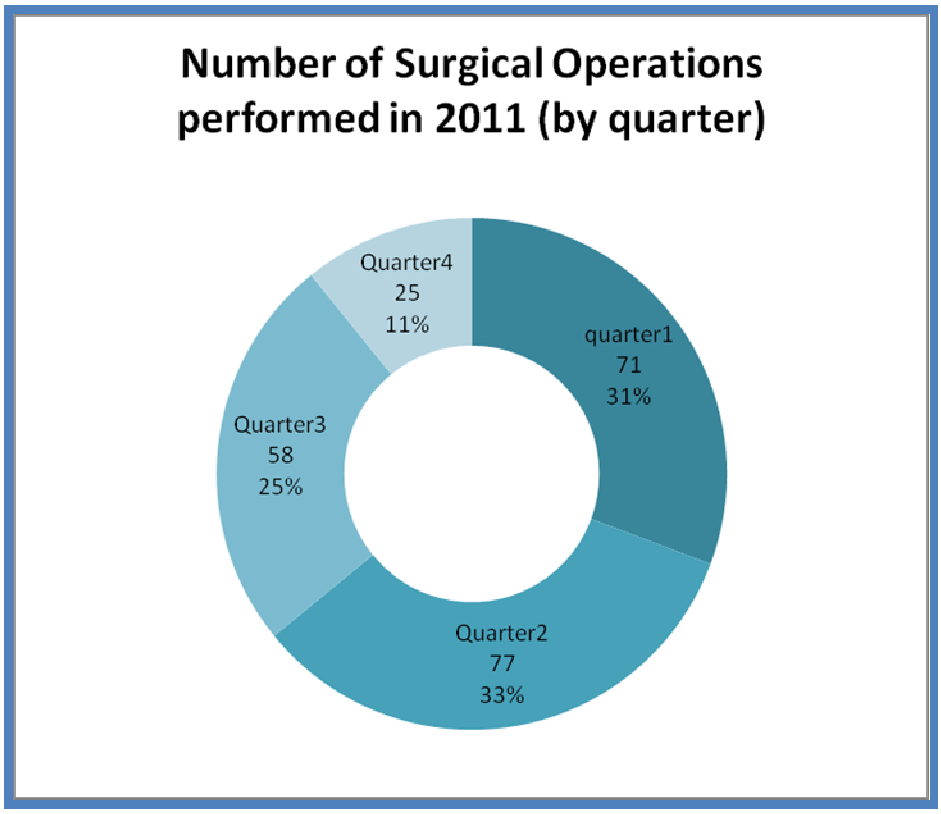
The Hospital started training a nurse to work in Theatre. When the theatre was not operating, the nurse was assisting surgeons in Surgical Ward, performing dressings and removing stitches in minor theatre, or assisting in autoclaving of instruments.

Table and pie chart below give you an idea about the kind of surgical operations performed at St. Francesco d' Assisi Hospital in 2011:

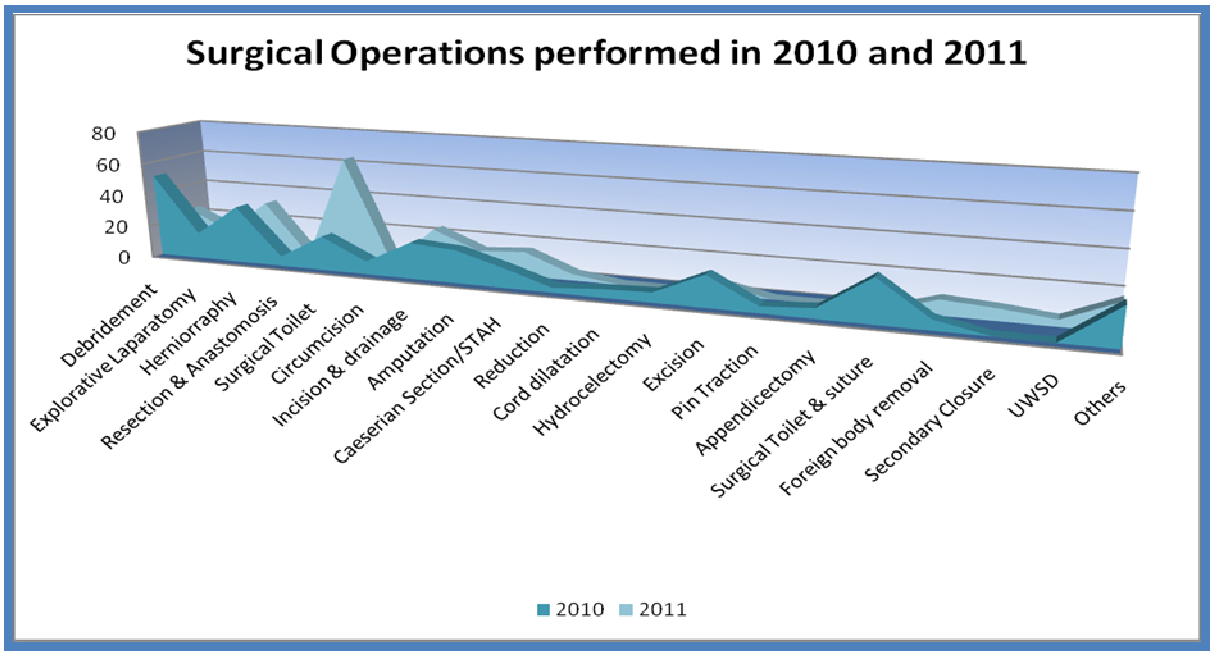
TYPE OF OPERATION	quarter1	Quarter2	Quarter3	Quarter4	2011
Debridement	6	8	8	2	24
Secondary Closure	0	0	7	0	7
Explorative laparatomy	7	1	3	1	12
Herniorrhapy	14	11	5	2	32
Surgical toilet	24	19	17	4	64
Incision and Drainage	6	14	2	2	24
Amputation	6	2	4	1	13
Caeserean section /STAH	2	6	5	2	15
Reduction	1	2	1	0	4
Excision	2	2	2	0	6
Foreign body	2	1	1	5	9
UWSD	1	0	3	0	4
Others	0	11	0	6	17
GRAND TOTAL	71	77	58	25	231



The following chart illustrates the number of Operations performed during the year, each quarter.



Next chart and Table compares data about surgical operations performed in 2010 and 2011:



TYPE OF OPERATION	2010	2011
Debridement	51	24
Explorative Laparatomy	16	12
Herniorraphy	35	32
Resection & Anastomosis	6	
Surgical Toilet	21	64
Circumcision	8	
Incision & drainage	22	24
Amputation	20	13
Caeserian Section/STAH	12	15
Reduction	3	4
Cord dilatation	5	
Hydrocelectomy	6	
Excision	19	6
Pin Traction	4	
Appendicectomy	6	
Surgical Toilet & suture	26	
Foreign body removal	6	9
Secondary Closure		7
UWSD		4
Others	23	17
GRAND TOTAL	289	231

3.7.1. Gun Shot Casualties

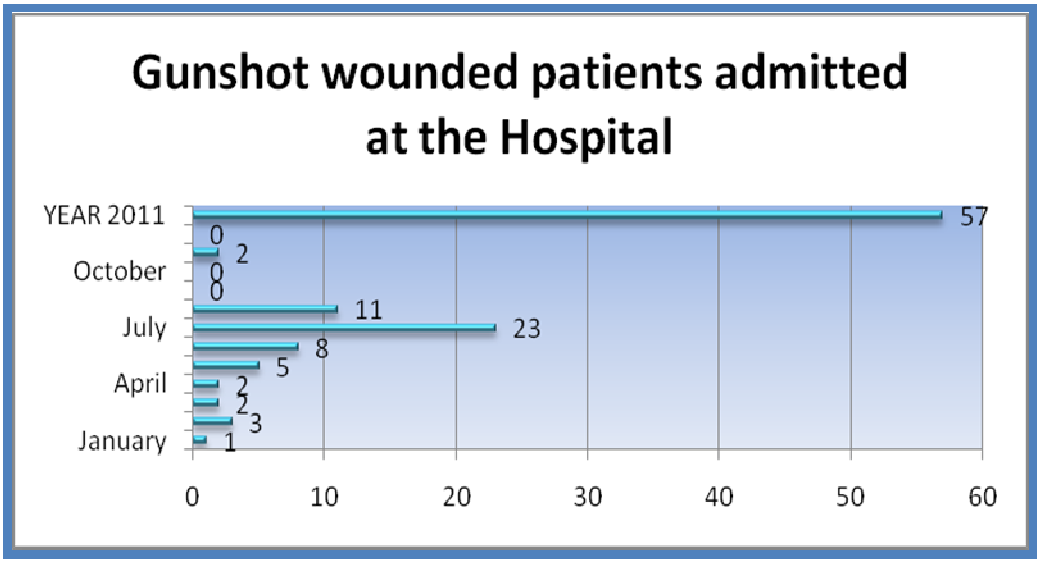
Up to mid August in the area of Marial Lou security was bad on and off, with cattle raiding and inter-clan clashes. Many people were injured and a few cases of gunshot wounded patients escaped from the Hospital, fearing to be assaulted again while hospitalized.

In August four gunshot wounded patients had to be referred to Wau Hospital. The ROSS sent the helicopter and took them there for further management. Patients had to be referred because the Hospital was unable to assess the entity of the damage without x-ray Service, and also because of lack of specific equipment like pin and plating for performing open reduction. One patient who was shot in the abdomen died on the operating table as a consequence of excessive, untreatable hemorrhage. Most of the patients referred to other Hospitals did not accept it, due to lack of money and communication means. They opted to go to local traditional healers and some of them came back to the Facility in worse conditions.

The biggest number of causalities occurred in the month of July followed by August, June and May.
For all the patients who came with gunshot wounds the procedure was to stabilize them after medical assessment and before deciding to manage them at the Hospital or transfer them to other Facilities for further treatment.

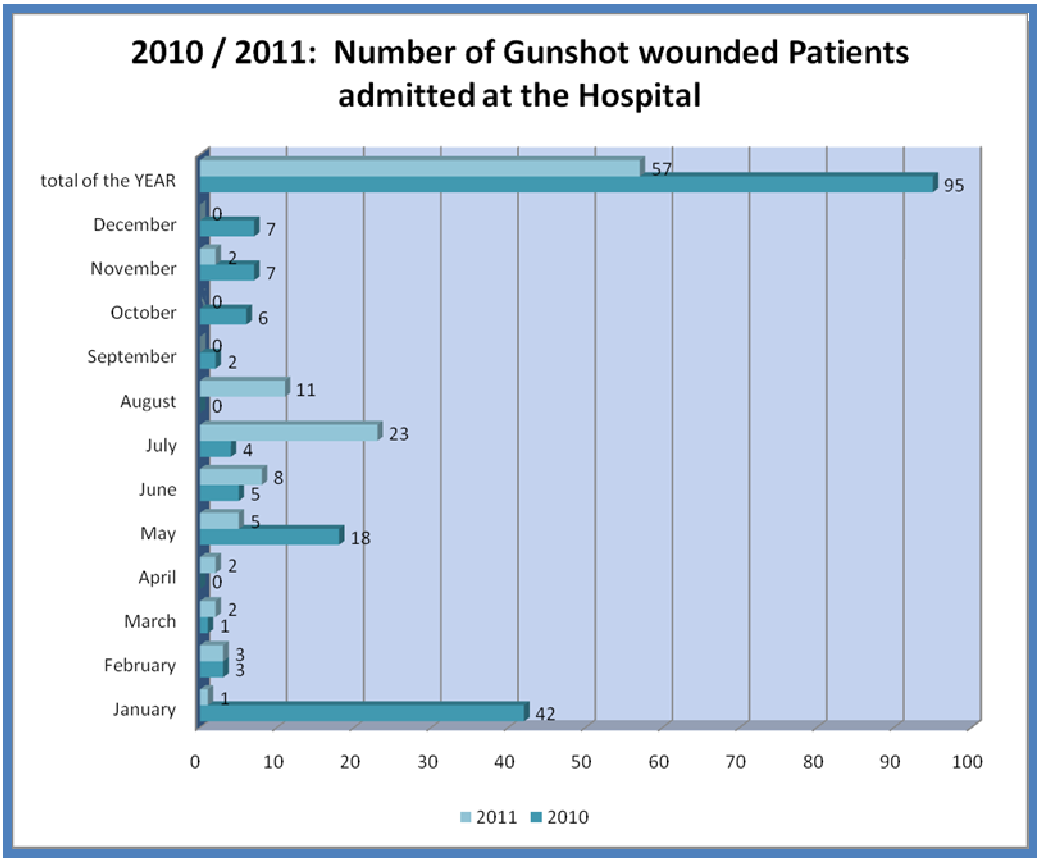
The table and chart below show the number of patients admitted during the year.

MONTH	NUMBER OF PATIENTS ADMITTED
January	1
February	3
March	2
April	2
May	5
June	8
July	23
August	11
September	0
October	0
November	2
December	0
Total	57



There was a decreasing in the number of gunshot wounded patients admitted at the Hospital after the community of Marial Lou and the neighbors were disarmed, in September/October.

The following chart gives you the number of gunshot wounded patients admitted at Facility in 2010 and 2011.



As you can see, the number of gunshot wounded patients decreased considerably in 2011.

3.8. OBSTETRICS AND GYNAECOLOGY WARD

Most of the patients of this category came to the Hospital after developing complications at home. Majority of the women from the community, in fact, prefers delivering at home assisted by traditional birth attendants due to cultural beliefs and/or lack of mean of transport. Those who attended ANC were provided with delivery kits to be used in case they decided to deliver at home. Thanks to the Health Education provided at the ANC, the number of pregnant women who came to deliver at the Hospital in 2011 was good.

This year, 2 maternal deaths occurred (one in March and the other in December) due to ruptured uterus. Both women were brought too late to the Hospital, when already in shock. The staff made all possible efforts for saving them, they even tried to perform hysterectomy but, in both cases, the shock was irreversible and the babies too were already dead.

Gynecological patients were attended by the gynecologists who worked full time at the department, for the whole year.

The total number of spontaneous abortions was **86**, prolonged/ obstructed labor cases were **13** and uterus ruptures were **2**.

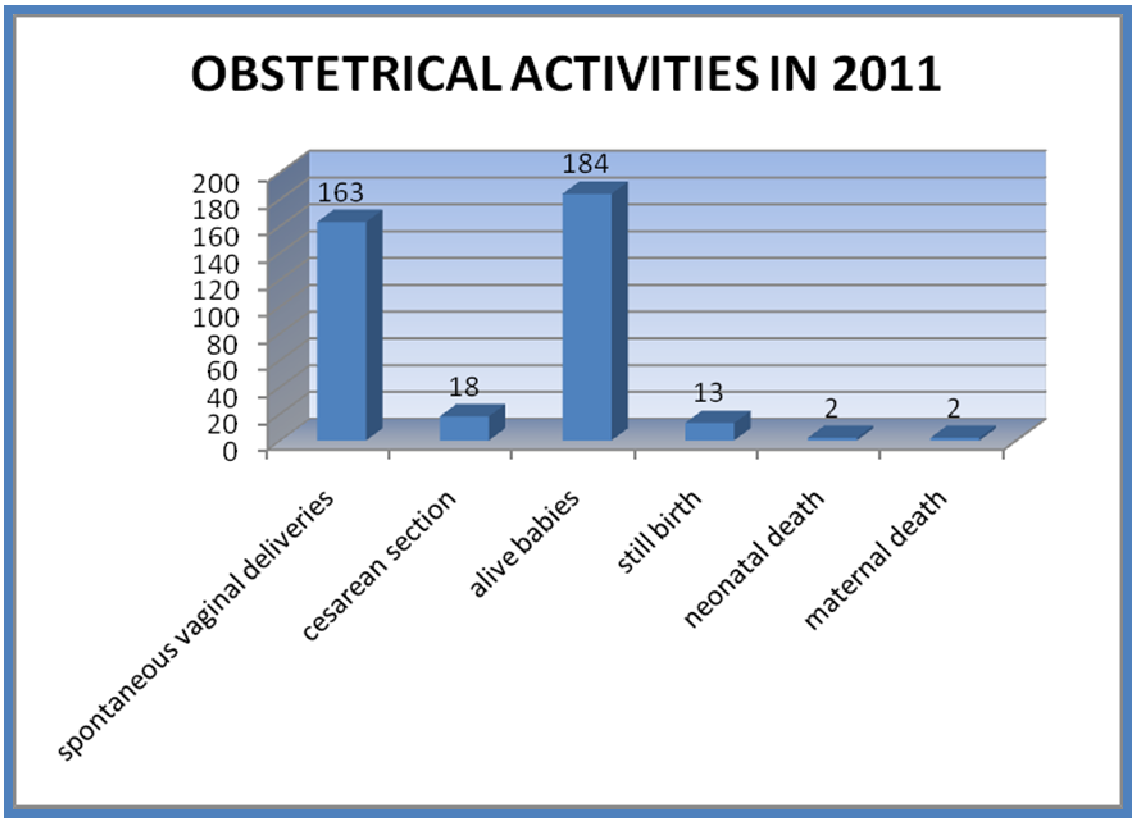
Most of the patients who presented at the Facility with spontaneous abortion had brucellosis positive test while others were RPR[6] test positive. In both cases patients were put on antibiotic treatment.

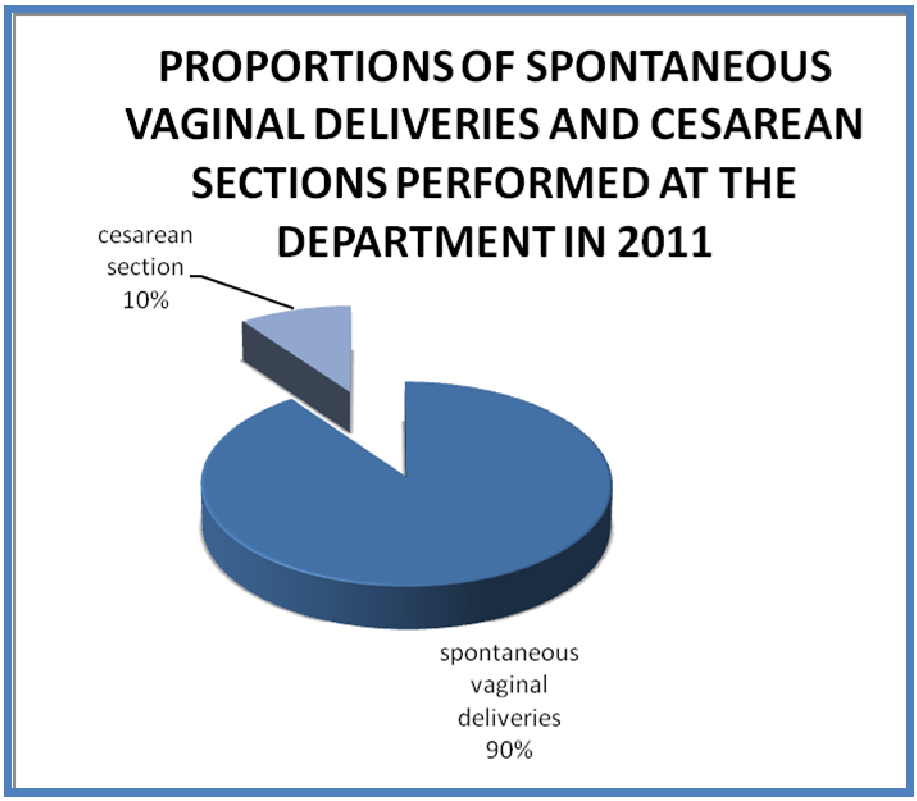
Still birth cases (**19**) mainly occurred in primigravida mothers, with breech presentation. They came to the Hospital after they had tried to deliver at home and they were on labor since 2 to 3 days.

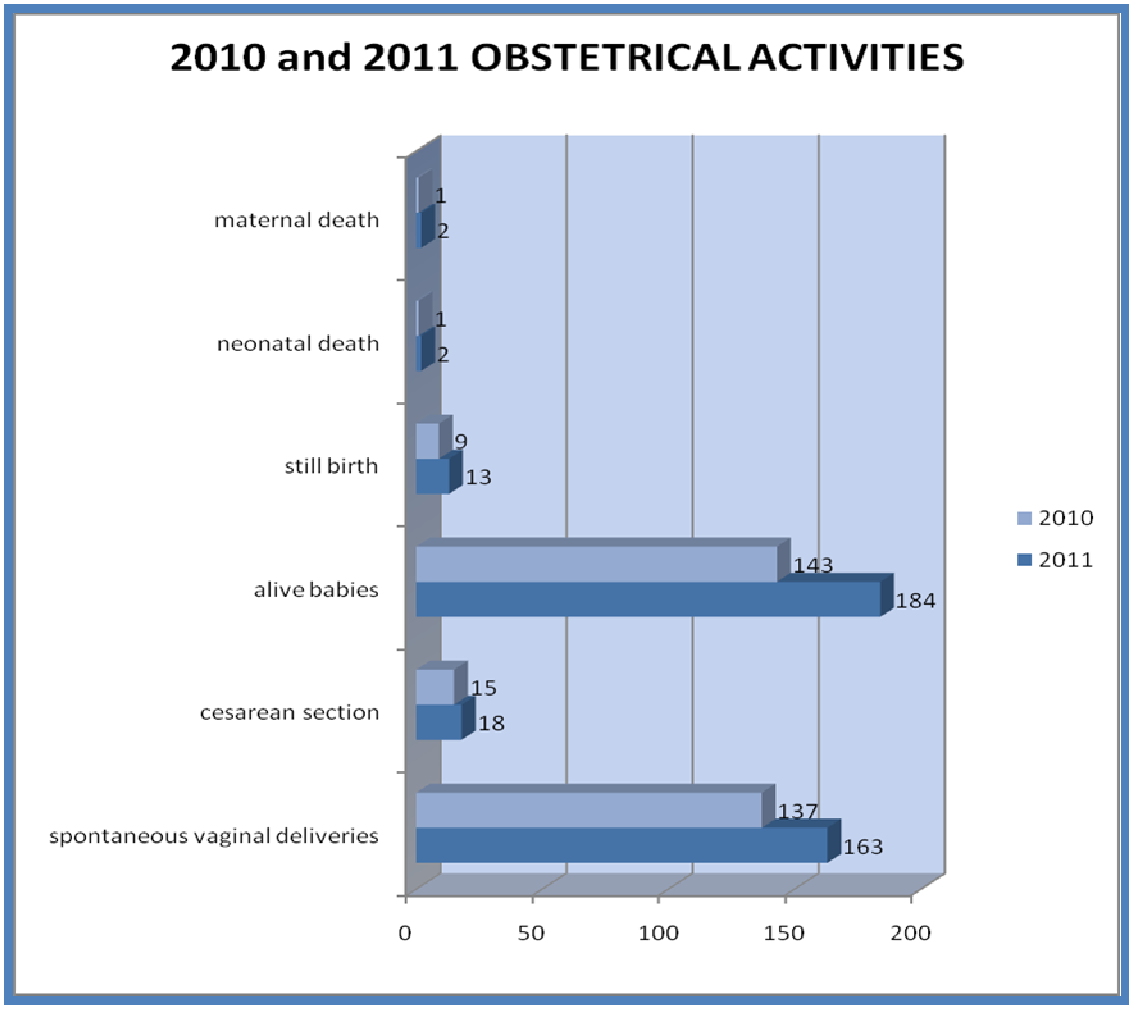
The table and chart below present obstetrical activities during the year:

month	Vaginal deliveries	Cesarean sections	Alive babies	Still births	Neonatal deaths	Maternal deaths
January	**7**	**2**	**9**	**1**	**0**	**0**
February	**7**	**2**	**11**	**2**	**1**	**0**
March	**9**	**2**	**11**	**2**	**1**	**1**
April	**8**	**3**	**11**	**3**	**0**	**0**
May	**22**	**2**	**24**	**0**	**0**	**0**
June	**18**	**0**	**19**	**1**	**0**	**0**
July	**15**	**2**	**18**	**0**	**0**	**0**
August	**7**	**2**	**9**	**0**	**0**	**0**
September	**17**	**0**	**17**	**0**	**0**	**0**
October	**21**	**0**	**20**	**1**	**0**	**0**
November	**16**	**1**	**18**	**0**	**0**	**0**
December	**16**	**2**	**17**	**3**	**0**	**1**
Total	**163**	**18**	**184**	**13**	**2**	**2**

[6] **RPR test**: Rapid plasma reagin is a blood test for syphilis that looks for an antibody that is present in the bloodstream when a patient has syphilis.


OBSTETRICAL ACTIVITIES IN 2011
200
180
160
140
120
100
80
60
40
20
0
163
18
184
13
2
2
spontaneous vaginal deliveries
cesarean section
alive babies
still birth
neonatal death
maternal death


PROPORTIONS OF SPONTANEOUS VAGINAL DELIVERIES AND CESAREAN SECTIONS PERFORMED AT THE DEPARTMENT IN 2011
cesarean section 10%
spontaneous vaginal deliveries 90%



The above chart shows 2010 and 2011 obstetrical cases compared. There was an increment in all the different categories and also in the proportion of maternal and neonatal deaths (in 2010 maternal deaths and neonatal deaths were both 0.6% of the total assisted deliveries, in 2011 the same indicators were 1.1% of total assisted deliveries). This is due to the fact that most of the assisted deliveries at the Hospital are still performed when some kind of emergency occurs: normally women prefers to deliver at home and when they decide to be assisted by the Hospital Service they had already tried to deliver at home and failed (both the two cases of neonatal and maternal death occurred in 2011 were due to ruptures of the uterus, a serious emergency even for Developed Countries' Maternity Services – cases had been discussed above).

On the other hand, it is always good to observe an increasing of the total number of deliveries assisted by skilled personnel at the Hospital.

The proportion of Caesarean Sections on the total number of deliveries performed at Maternity Service had remained the same (9.9%).

4.0. OTHER HOSPITAL ACTIVITIES

4.1. CAPACITY BUILDING

The level of education of the local community is generally low because in Marial Lou there are no secondary schools. As a consequence, the manpower for the Hospital is a big challenge as people who are in P4 – P8 have to be trained as medical staff. Because of this, supervision is a must at any stage of training, so to verify all procedures are properly performed. Unfortunately many students leave the Hospital after completing the training, to join other NGOS: this means the training has to be permanently run to avoid the Hospital remaining without the proper number of well trained staff.
During the year nurse assistants, laboratory technicians and autoclaving department's staff were trained.
Nurse Assistants on training benefited of continuous bed-side training done every day by doctors, during the ward round. They were encouraged to do most of the routine procedures under the supervision of the doctors and other qualified personnel.
They also attended classes, three days per week. Two students were trained on anesthesia procedures.
Three students were trained on laboratory techniques and procedures.

Most of the students (8) who concluded the 9 months' training as nurse assistants on March 2011 left the Hospital after receiving the Certificates to join other Health Services in the area. Another class of 10 students was then started the same month. These students will qualify in February 2012.

In 2011 **10** staffs at St. Francesco D'Assisi Marial Lou Hospital were trained in Management of SAM.

4.2. HEALTH EDUCATION

Health education on different topics (general hygiene, importance of immunization, family planning, healthy nutrition, HIV and AIDS, prevention of communicable diseases, etc.) was given on daily basis by qualified staff at all the departments: OPD, IPD and ANC.
All patients and caretakers benefitted from it. As a consequence an increasing in the number of patients attending the different Departments was registered.
The number of mothers attending ANC augmented too: this was an indication that the community understood the importance of the different topics covered by the health education's sessions and that their behavior was changing.
Health education was given at any time to the patients and to the caretakers of malnourished children. All the patients were also encouraged to do farming, growing greens and vegetables with which they would feed their families so to avoid malnutrition. To show them how to farm in the proper way, a Demonstration Garden was set. No children were brought back due to relapse of Malnutrition: this was a indicator of success of the health education given.

More than **50,000** people in Marial Lou and surrounding area benefitted from the health education given at the Facility.

4.3. WARD ROUNDS

The hospital ward rounds were conducted on daily basis in all the IPD's wards so to assess the general condition of patients and decide the ones to be discharged and who was in need of renewed treatment. Major ward round was conducted at the pediatric ward on Wednesday, while on Thursdays there was a major ward round in adult and maternity wards. During these major ward rounds doctors gave suggestions on each patient individually, and consulted each other about patients having complications or not improving. This enhanced the management and the care of patients in the entire hospital.

4.4. HOSPITAL HYGIENE

The hospital was kept clean throughout the year with wards being cleaned twice a day.
This year water and sanitation system was improved thanks to support of ECOSAN Organization.
Despite Health Education given to all the Hospital attainders, it was difficult to convince them to use the toilet, as in the local culture people normally do not do so.
General cleaning of the entire hospital was done once a month. This involved scrubbing of walls, high dusting of the roofs, and disinfection of beds, mattresses and hospital linen.
The sanitarian staffs disposed in the correct way the hospital garbage and maintained the hospital hygiene at its best.
Because of termites' infestation, it was necessary spraying an appropriate solution on monthly basis.

4.5. HOSPITAL MEETINGS

As in the previous years, meeting for expatriate staffs was held every Saturday morning. The main agenda was still to discuss and share information on ways of improving delivery of health services at the Hospital.

On every first Saturday of the month, monthly meetings of local and expatriate staffs were held too. During these meetings challenges facing by the staff were deliberated at length with a view of getting solutions. The forum was also used to disseminate any official information of particular concern to the hospital staff. The meetings proved very beneficial as it boosted an atmosphere of understanding and cooperation among the staff members. This helped the staff to work as a team.

Meetings for ward in-charges, matron and doctors continued also to be held in 2011. The meeting always sought to look for practical solutions for the challenges facing by the hospital.

5.0. STAFF

The Hospital is run both by expatriate and local staffs.
The salary for all of them was kindly supported by LA GOCCIA: without this important contribution, no achievement could have been realized at the Facility.

Expatriate Staff:

- Hospital Director
- Expatriate Matron
- Expatriate Laboratory Technician
- Expatriate Anaesthesiologist/ Pharmacist
- Expatriate Logistician

There are also Expatriate Volunteer Doctors from Slovakia St. Elisabeth University: one surgeon or even two doctors (surgeon and gynaecologist) alternate themselves in the field every 3 – 6 months.
An Expatriate Nutritionist too is based at Marial Lou Hospital, supported by the same Donor that funds Nutrition Program.

The total number of the Local Staff is **45,** with different responsibility and job descriptions:

- Head Nurse
- Qualified Nurses
- Nurse assistants
- On job training Nurse assistants
- Administrator
- Other administrative staffs like cleaners, cooks, watchmen, etc.

6.0. HOSPITAL BUILDINGS REHABILITATION

The buildings of the Hospital are in need of constant rehabilitation because the most part of them is made of local materials that deteriorate easily over the years, especially in South Sudan, where very extreme weather conditions are normally experienced.
In 2011, Paediatric Ward and Living Compound buildings were rehabilitated thanks to the good work of BMM funded by ERKO/DKA Organizations.
ECOSAN Organization improved Water and Sanitation System at the Facility. The Project was supported by ERKO/DKA too.

7.0. SUPPORTING DONORS

All the Programs at St. Francesco D' Assisi Hospital were implemented with and would not have been running without the support of the following partners:

- **LA GOCCIA** – supported salaries for both expatriate and national staff working at the Hospital
- **ERKO/DKA** – provided equipment, furniture and Internet Service, improved water and sanitation system and supported the rehabilitation of the Hospital too
- **GOVERNMENT OF SOUTH SUDAN (GoSS) – MINISTRY OF HEALTH (MoH)** – supplied drugs and medical kits
- **SIGN OF HOPE-GERMANY** – supported Nutrition and Primary Health Care Programs providing drugs, other medical items and food for patients admitted at Nutrition Program.
- **UNICEF** – supported Nutrition Program in December 2011, with food, tool kits and medicines

- **WFP** – provided food for some categories of patients admitted at the Hospital
- **ST ELISABETH UNIVERSITY, SLOVAKIA** – the University supported the Hospital by sending volunteer Doctors to work at the Hospital.

8. o. VISITORS

The Hospital had a number of Visitors through the year, listed below:

- Sign of Hope personnel, in March
- ECOSAN staff, in March and November
- Erko staff, in March
- Ministry of Health of South Sudan Representatives
- AAA Medical Coordinator, Dr Callixte Minani
- AAA monitoring and evaluation coordinator

9.o. CONSTRAINTS

- Lack of x-ray department to help managing patients with trauma.
  At the end of May 2011, the Medical Director presented a request to the GoSS-MoH in order to receive support for the Hospital so to build an x-ray Department. At the same time he was also requesting for the salary of the local Staff to be topped by the GoSS.
  Up to now no actions had been taken, but the GoSS promised to consider the requests.

- Some mothers and children did not receive the proper immunization as per GoSS schedule, even if they were always addressed by the staff working at the Hospital to the PHCU/PHCC

where EPI[7] program is run. This is mainly due to long distances to be covered and/or lack of means of transport. At the moment, in Marial Lou area CCM Italy is running this kind of Program. In all Regions of South Sudan EPI activities are coordinated in order to avoid some locations to be provided of more than one vaccination centre and the others remaining completely lacking the service. Unfortunately some Regions' extension is still too big and/or the environment is too bushy for the Service to reach all the remote places where the population is living. Marial Lou represents one of these cases. The Hospital Director already requested the GoSS – MoH to be added to the facilities running Immunization Program, but according to the office coordinating the Project, CCM-Italy activities are already covering the needs in the area.

- A lot of manpower was used to train nurse assistants who left after getting skills and knowledge, as they were not ready to follow rules and regulations of the Hospital

- Some of the patients who were diagnosed with brucellosis did not improved despite the treatment given as they continued drinking raw milk and undercooked meat of infected animals. This was due to a cultural belief that boiling milk made the cow develop mastitis and reduced the amount of milk produced.

- Lack of EMO /OMV for anaesthesia at the theatre, and reference books for training the students.

- Some patients escaped from the Hospital opting for traditional healers, then coming back in very bad conditions.

- Patients and caretakers are still not using the toilet, due to a cultural habit, despite all the health education given.

[7] The current goals of the EPI are: to ensure full immunization of children under one year of age in every district, to globally eradicate poliomyelitis, to reduce maternal and neonatal tetanus to an incidence rate of less than one case per 1,000 births by 2005, to cut in half the number of measles-related deaths that occurred in 1999, and to extend all new vaccine and preventive health interventions to children in all districts in the world.

10.0. RECOMMENDATIONS

- Continue educating the community on the importance of boiling milk and eating well cooked meat to avoid contracting Brucellosis, on the importance of using toilet and improved water sources, and on the importance of vaccinations.

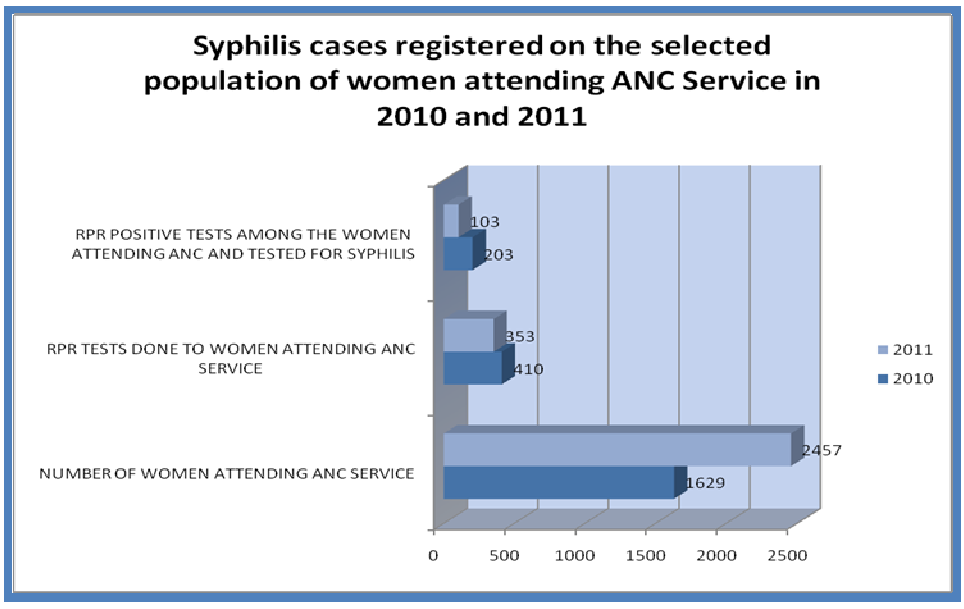
11.0. CONCLUSIONS

The Hospital achievements for 2011 are fulfilling the most part of expected outcomes for the projects run at OPD and IPD:

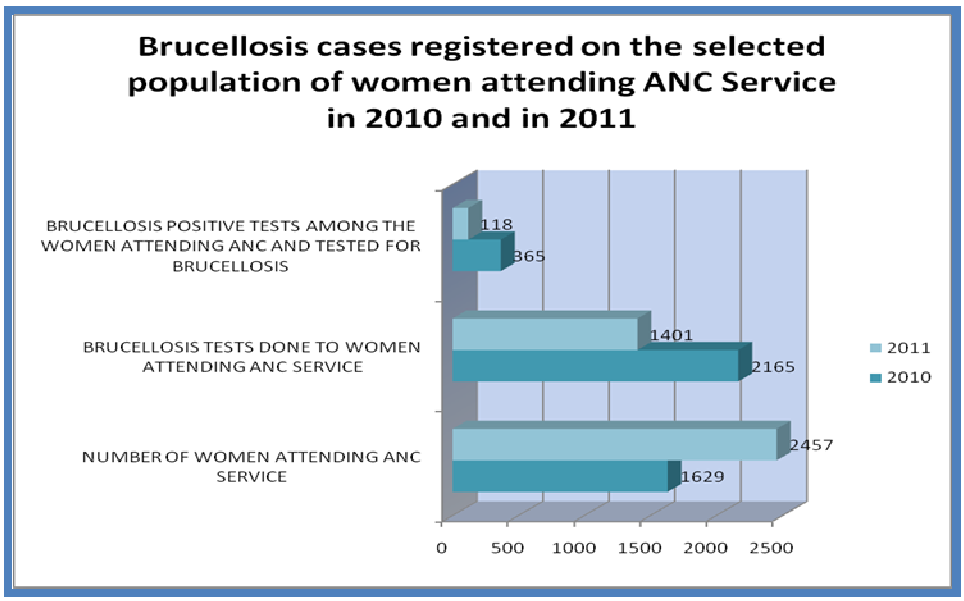
- More than the expected 12,000 patients were treated at OPD : the OPD treated **14,379** patients in 2011 (3478 more than in 2010)
- Availability of stock of drugs at any one time was maintained.
- The staff benefitted from job training and training courses**: 8** nurse assistants completed their training and **9** more are still on training; **3** lab technician assistants are on training; **8** staffs were trained on SAM Management; **1** anaesthesiologist assistant is still on training)
- The local community was sensitized (the expected outcome was: "at least 3,000 mothers living around Marial Lou will benefit from awareness creation and health education on Nutrition"): more than **1,000** people per month in Marial Lou and surrounding area benefitted from the health education given at the Facility. Nutrition was always among the topics covered by Health Education.
- An increase in the number of women visiting the hospital for **immunization** and **ANC** services: The second target was achieved as in 2010 ANC 1st visits were 1629 while in 2011 they were 2457. ANC follow up visits too increased in number: in 2010 they were 1083, in 2011 they were 1385. Immunizations were not given at the Facility, but pregnant women and

mothers were always addressed to other EPI Services for their own TT immunizations and for the children ones.

- Recommendation from the MOH for provision of quality services offered: the Hospital received the visit of MOH Representatives and they inspected and evaluated the Hospital. They found the Hospital to be very well managed and they were impressed by the activities run at the different Services.
- Reduced burden of diseases among the community: It is not easy to give exact measures of the general burden of diseases in a community, unless considering single diseases and selected population of patients. The simple decreasing in the number of cases of a particular disease seen at the Facility does not necessarily means that the burden of that disease has really reduced in the community. In some particular cases, instead, this can be a good indicator. In Marial Lou, for example, Brucellosis and Syphilis cases decreased in 2011. **RPR** (test for Syphilis) positive patients registered at the ANC Service in 2010 were **203** (on 410 tests done = 49%) while in 2011 they were **103** (on 353 tests done (29 %)). At the same time, the number of women attending ANC Service increased in 2011 (see the chart below). **277** patients were treated for Syphilis (the number includes husbands and co-wives who accepted to be treated too) in 2010, while **140** patients were treated in 2011).



Another example of disease the burden of which seems to be reduced in 2011 is **Brucellosis**: 365 cases were treated in 2010 (out of 2165 tests done→ % positive = 17%) while 118 cases were treated in 2011 (out of 1401 tests done → % of positive = 8%).



- Equipment was purchased.
- For the therapeutic and supplementary feeding centres, to admit and feed at least 350 malnourished children: the target number was not achieved if we consider only the under 5 children, **but good quality treatment was provided,** as the indicators show.
- **100%** of beneficiaries have known prevention measures of malnutrition: this target was achieved.
- The cure rate of all beneficiaries: it is impossible to practically reach this target as Medical Services deal with Human lives. Even though the target always was considered as the Ideal one for all the Staffs working at the Facility. As a consequence the cure rate at the Facility improved. E.g. among the patients admitted at IPD (for which we can assess the outcome)[8], the proportion of the ones that exited as cured in 2010 was **90 %** of the total number of exits, while in 2011 it was **94 %**.

[8] About patients seen at the OPD, the Facility only registers diagnosis and treatment data, as patients are given drugs and are sent home. This is why it is not possible to assess the outcome of patients for OPD department.

The Hospital in Marial Lou is a rural one. Being so, in a young Country still facing so many challenges, represents an additional difficulty.
The area where the Hospital is located is far from the main roads, in a bushy area: many times, even supplying the Hospital with drugs or other medical items results in a very complicated operation, especially during the rainy season when the pathways normally connecting to the main roads are muddy or completely overflowed or even destroyed because of the floods.
Running a Hospital in such conditions it is a hard work that requires to be supported in very many ways.
But the need for the Hospital in the area is a real one, as the Governmental Health System is not yet self-sufficient and almost dependent on the assistance of NGOs to run the different Health Programs.
The Programs run at Marial Lou Hospital are very important for the local community, and even the GoSS-MoH recognized the strategic and basic work the Facility is providing to South Sudanese Population.

Without the support of LA GOCCIA and the other Partner Donors, those Programs would not have been offered to the community.

Among Donors, LA GOCCIA provided all the salaries both for expatriate and local staff. As already stated, keeping the staff motivated to work in such bushy area is not easy, and without LA GOCCIA support it would never have been possible.

AAA is grateful for this, and looks forward to the continued collaboration and support from LA GOCCIA to S. Francesco D'Assisi Hospital in Marial Lou in 2012 too.