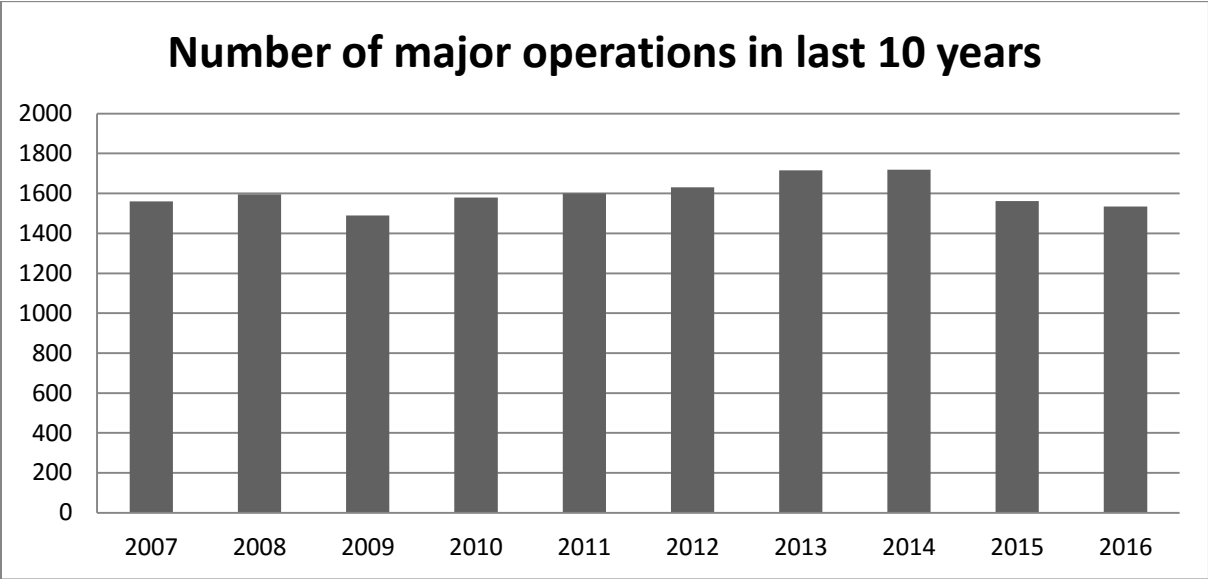


# SURGICAL DEPARTMENT

(Including all Surgery)

In 2016 the total number of operated patients was **1404**, 51 patients less than year before and the total number of major operations reached **1535**, 27 less than in previous year. The difference between number of operated patients and number of major operations results from this that some of them have multiple procedures.

**Table 1.**



There is still shortage of permanent staff in surgical department . Sr.Dr. Fausta Liundi left last year for master study in surgery at Mwanza. Since then there were no new permanent staff employed.

Thanks to project “Quality improvement of surgical treatment in St. Walburg’s Hospital Nyangao, Lindi and Mtwara Regions” financed by Polish Aid was possible to offer practice for 7 doctors for periods from 4 to 8 weeks who were gaining surgical experience but also helping us to pass that difficult time. Additionally Dr. Inge de Grauw who come back in August from Netherlands with husband was also helping in surgical department. In August Dr. Katarzyna Pikulska Polish volunteer joined our staff for 8 weeks within the program “Improving quality of medical care provided in Lindi Rural District (Tanzania) by Polish Foundation “Science for Development”. Details of all of them with names and photos are included on our website page “Events 2016”.

Taking under consideration our actual settings (number of surgical staff and equipment capacity) it seems that we reach top level in number of major operations. Our hospital is not including to the major surgery such procedures as vein section, skeletal traction, joints aspiration, circumcision, release of fused labia minor, foreign body removal from esophagus, nose ear, etc what some other hospitals do, we are counting it as minor procedures.

Most of the patients admitted to surgical ward don't have any referral letter. They are coming directly from home or after spending few days in another hospital where they are not satisfy from service. Despite of fact that catchment area for Nynangao Hospital is Lindi Rural District they are coming from whole Lindi and Mtwara Region and more often from Mozambique. Number of patients from outside our official catchment area is reaching 70-80%.

Nyangao Hospital is only one in Lindi Region offering most of specialist operations from general surgery, orthopedics, urology and practically is acting as referral hospital for mentioned specializations.

**Table 2. Number of admissions to Surgical Ward**

Ward	No. of beds	No of admissions
<b>Male (1B)</b>	30	852
<b>Female (2B)</b>	16	371
<b>Children (3B)</b>	8	213
<b>Private surg.</b>	2-3	160
<b>TOTAL</b>	<b>56-57</b>	<b>1596</b>

**Table 3. The ratio of different types of operations. In brackets number of cases.**

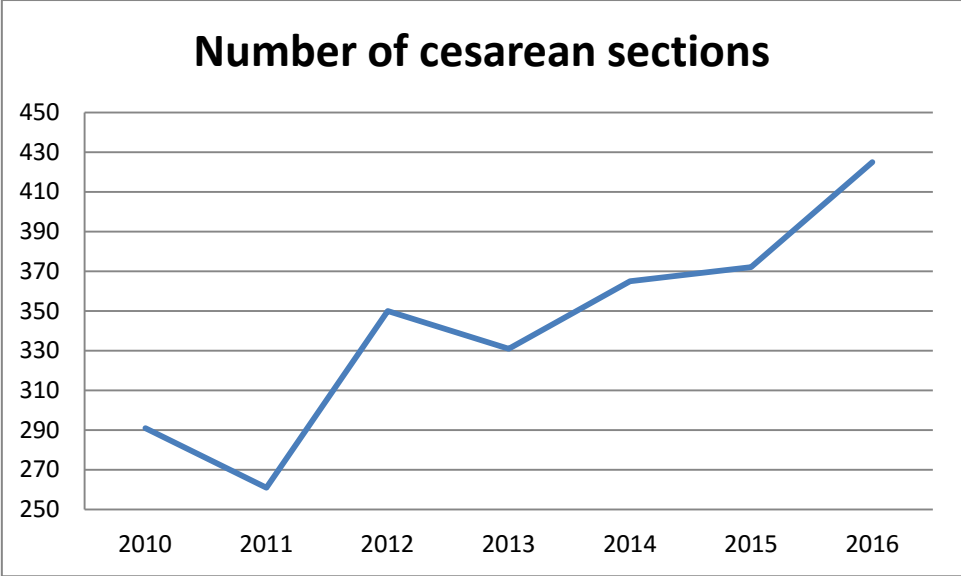
Gyn/Obst	<b>51,2%</b> (785)
General Surgery	<b>28,8%</b> (443)
Orthopedics	<b>11,7%</b> (179)
Urology	<b>8,3%</b> (128)

**Emergency procedures accounted for approx. 1/3 of total procedures.**

**Table 4. Top five most common operations in 2016.**

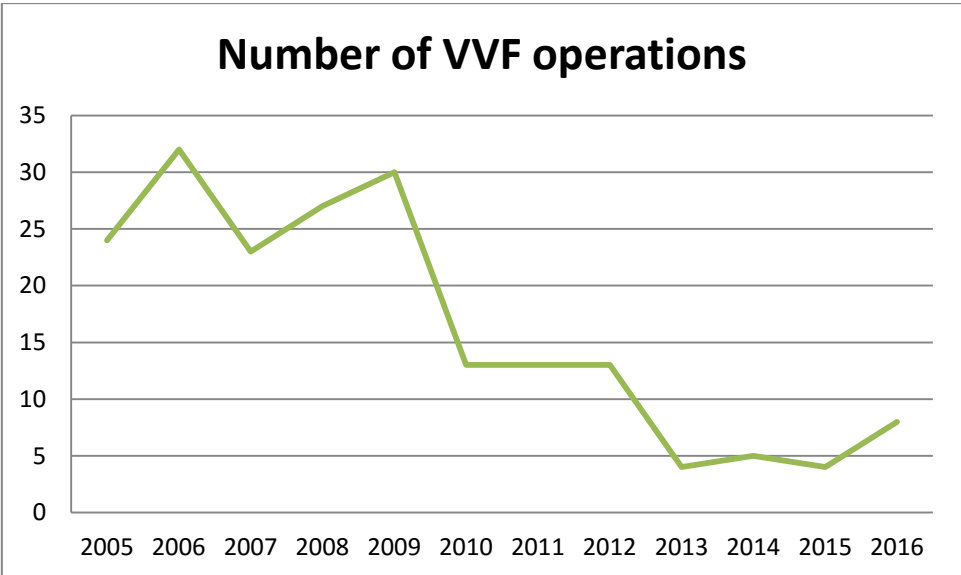
Type of operation	No of cases
Cesarean section	425
Abdominal hysterectomy	178
Herniorrhaphy (various type)	113
Adnexectomy/salpingectomy/cystectomy	85
Excision various superficial tumours, biopsy	53

**Table 5. Number of cesarean sections in last 7 years**



Above table is showing constant rise in number of cesareans sections. Unfortunately some of them has septic complications caused in one of them due to forgotten foreign body (abdominal towel). Cesarean section present 24,3% of total deliveries which were 1748.

**Table 6. Number of VVF operations in recent years:**



It is clear seen that number of VVF (obstetrical fistula) operated in Nyangao Hospital is dropping down since 2009. We believe that great improvement of telecommunication (cell phones) and transport by motorcycles (Boda Boda) and other vehicles is mainly responsible for it. Woman expecting delivery even from remote locations have chance to reach health facility in satisfactory time.

**Table 7. Five most common diagnoses of in-patients**

Ward 1B	Ward 2B	Ward 3B
Hernia	Hernia	Fracture (predom. femur)
Hydrocele	Tumour of skin and subcut.	Hernia
Bone fracture	Wound, contusion	Burns
Contusion, wound	Abdominal tumour	Osteomyelitis
Tumours of skin and subcut.	Fracture	Contusion, wound

**Traumatic cases:**

Total number traumatic cases treated in Nyangao hospital is still growing. They are creating around 50 % total admissions in Surgical Department. Most of them are victims of traffic accidents, caused especially by motorcycles. Around 60% of them have fractures, mainly lower extremities, about 2/3 and 1/3 upper extremities. Most of hospitals including Regional Referral Hospitals Lindi and Mtwara don't have basic equipment and experienced doctors on such a field.

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**Table 8. Major operations performed in Nyangao Hospital**

<b>Head and Neck:</b>	
Thyroidectomy	16
Tracheostomy	1
<b>Total Head and Neck</b>	<b>17</b>
<b>Chest:</b>	
Mastectomy (palliative and radical)	15
Lumpectomy	5
<b>Total Chest</b>	<b>20</b>
<b>Abdomen:</b>	
Inguinal hernia	77
Laparotomy for peritonitis	24

Inguinal hernia obstructed	21
Exploratory laparotomy (biopsy, drainage)	19
Epigastric hernia op.	11
Anal fissure op.	11
Adhesiolysis of bowels	11
Appendectomy	10
Small intestine repair	10
Ulcerorrhaphy	10
Splenectomy	9
Sigmoidectomy	9
Anal fistula op.	8
Resuturing of burst abdomen	7
Partial resection of small intestine with anastomosis	6
Haemorrhoidectomy	5
Umbilical hernia op.	5
Colostomy	4
Gastrostomy	4
Hartmann's procedure	3
Hemicolectomy	3
Sigmoid derotation	3
Colostomy closure (opening)	2
Incisional hernia op.	2
Cholecystectomy	2
Ileocecal resection	2
Femoral hernia op.	2
Jejuno or ileo-transversostomy	2
Ileostomy	2
Big intestine repair	2
Choledochoduodeno anastomosis	2
Imperforated anus opening, plasty	1
Liver injury repair	1
Partial colon resection with anastomosis	1
Hellers myotomy for achalasia	1
Lower leg varices op.	1
Reanastomosis post Hartmann's op.	1
Cystogastrostomy (Jurasz)	1
Repair injured brachial artery	1
Swenson op. for Hirschprung	1
Liver cyst excision	1
<b>Total Abdomen</b>	<b>298</b>
<b>Skin and Subcutaneous Tissue</b>	
Excision of various tumours, biopsy	53
Wound toilet and suture, incision and drainage	41
Skin graft	12
Skin plasty	1
Ungrowing nail op.	1
<b>Total Skin and Subcutaneous Tissue</b>	<b>108</b>
<b>Bones and Joints</b>	

ORIF (Küntscher nail-30, plates & screws-3, Kirschner wire-4,	37
Operations for osteomyelitis	36
External fixation	36
Metal implants removal	24
Above knee amputation	16
Fingers (toes) amputation	9
Above elbow amputation	7
Below knee amputation	6
Foot amputation	2
Below elbow amputation	1
Tibial traction (in Op. Theatre)	1
Arthrotomy	1
Fracture close reduction	1
Dislocated hip reduction	1
Ganglion excision	1
<b>Total Bones and Joints</b>	<b>179</b>
<b>Urological:</b>	
Orchidectomy	36
Hydrocelectomy	35
Prostatectomy	15
Bouginae	10
Cystotomy	9
Partial scrotal resection and plasty	6
Ureterocystoneostomy	4
Urethral fistula closure	3
Urethral caruncle excision	2
Funiculocele excision	2
Orchidopexy	1
Urine bladder repair	1
Cystolithotomy	1
Ureterolithotomy	1
Nephrectomy	1
Hypospadiasis plasty	1
<b>Total Urological</b>	<b>128</b>
<b>Gynecological operations:</b>	
TAH with adnexa	78
TAH	64
Adnexectomy (incl. ectopic pregnancy)	50
Subtotal hysterectomy (incl.due to rupture of uterus)	36
BTL	34
Salpingectomy (incl. ectopic pregnancy)	20
Cystoophorectomy	15
TVH	13
Kolporrhaphy anterior	12
Myomectomy	11
VVF repair	8
Adhesiolysis of adnexa, stomatoplasty	6
Operation for Bartholin's cyst	6

Perineal plasty	3
Kolporrhaphy posterior	1
Perineal warts excision	1
Cervix cerclage	1
<b>Total Gynecological</b>	<b>359</b>
<b>Obstetrical operations:</b>	
Cesarean section	425
Uterus repair	1
<b>Total Obstetrical</b>	<b>426</b>
<b>Total major operations</b>	
	<b>1535</b>

**Table: 9**

<b>Minor procedures:</b>	
Reduction of bone fracture and immobilization	469
Incision and drainage (I&D)	161
Wound suture and surgical toilet	123
Reduction of dislocated joint	29
Foreign body removal (nose, ear, oesophagus)	18
Joints aspiration	16
Needle biopsy	14
Excisional biopsy	4
Circumcision	4
Under water seal chest drainage	2
Chest aspiration and drainage	2
<b>Total</b>	<b>842</b>

**Table 10: Anesthesia**

Type of anaesthesia	Op. Th.	Sept. Th.	OPD	Deliv. R.	Total
Spinal	799	21	-	-	820
Ketamine	681	261	11	199	1152
Gen. with intubation	149	-	-	-	149
Gen. with LMA	68	-	-	-	68
Local	15	212	32	-	259
<b>Total</b>	<b>1712</b>	<b>494</b>	<b>43</b>	<b>199</b>	<b>2448</b>

We are very grateful for the help provided by Dr. Daniela Kietzmann German anesthetist working in Sweden who is coming to us every year training our anesthetic staff and supplying with important anesthetic equipment.

The table below is presenting histology results received during 2016. After very effective and free of charge one year help from histopathologist Dr. Zbigniew Antosz from Poland hospital established cooperation with Oncology Centre in Bydgoszcz Poland. Cost of examination is covering by another generous private donor.

**Table 11: Pathology examinations**

Site	No	Pathology	No
<b>Skin and subcutaneous tissue</b>	<b>50</b>	Carcinoma	16
		Non specific inflammatory process	11
		Sarcoma	4
		Melanoma malignant	3
		Keratosi	3
		No path. changes	2
		Lymphoma	2
		Fibromatosis	2
		Leyomyoma	1
		Pleomorphic adenoma	1
		Ameloblastoma	1
		Schistosomiasis	1
		Keloid	1
		Malignant Schwannoma	1
Giant cell synovitis	1		
<b>Peripheral Lymphnodes</b>	<b>11</b>	Inflammation	8
		Malignant lymphoma	3
<b>Uterus w/cervix, Vagina, vulva</b>	<b>55</b>	Carcinoma	22
		Cervicitis	16
		Leyomyoma	4
		Endometriosis	3
		Molar pregnancy	2
		Schistosomiasis	2
		Sarcoma	2
		Chronic inflammation	1
		Granuloma	1
		Nabotian cyst	1
Endometrium	1		
<b>Prostata</b>	<b>24</b>	Cancer	15
		No prostatic tissue	5
		Hyperplasia	4
<b>Brest</b>	<b>19</b>	Carcinoma	12
		Fibroadenoma	6
		Chronic inflammation	1
<b>Nostrile, parotid gland, mouth, lips, jaws</b>	<b>1</b>	Sialadenitis	1
<b>Anus, rectum</b>	<b>4</b>	Carcinoma	3
		Proctitis	1



<b>Ovary</b>	<b>5</b>	Carcinoma	3
		Fibroma	2
<b>Skeleton tissue</b>	<b>1</b>	Chondroma	1
<b>Periton. omentum</b>	<b>3</b>	Carcinoma	2
		Fibrosarcoma	1
<b>Liver</b>	<b>1</b>	Burkitts lymphoma	1
<b>Large intestine</b>	<b>2</b>	Carcinoma	1
		Chronic inflammation	1
<b>Thyroid gland</b>	<b>1</b>	Nodular goitre	1
<b>Results not received</b>			7
<b>Total sent</b>			<b>177</b>

#### Our achievements:

- Computerized Radiography unit donated by Polish Aid project start working in December improving greatly x-ray service so often used for surgical patients. (photo)



- Continuation of project “Quality improvement of surgical treatment in St. Walburg’s Hospital Nyangao, Lindi and Mtwara Regions” financed by Polish Aid allow us to support our difficult staff situation by local doctors and foreign volunteers.

#### Our constrains and failures:

- Despite of some achievements the main problem remains unchanged – lack of qualified permanent doctors. Temporary employment of doctors who have no surgical experience or additionally have other duties is not changing much situation in department which is receiving many of difficult referral cases.
- There is practically no effective policy of referral system and protecting against overcrowding by all patients who wish to be admitted to Nyangao Surgical Department.