



SOLAR PANEL AND BATTERIES FOR THE SOLAR

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BOARD CHAIRMAN'S LETTER

Dear Friends of St. Gabriel's Hospital,

2017 was again a good year for St. Gabriel's Hospital and especially for the many patients that could get medical treatment. We are looking back with gratitude on the good results of 2017. The number of patients in Outpatient Department rose to more than 49,000. We see a little decline in adult and Pediatric admissions. The rise in intensive care unit shows that often the seriously ill patients come to St. Gabriel's Hospital. Many patients were treated in surgery, endoscopy and ultrasound scan. These specialized services are very important for the excellent reputation of St. Gabriel's hospital. In 2017 a team of German dentists came for the first time and helped many patients.

The Board of Governors is proud that St. Gabriel's Hospital fulfills its mission in the community and for the whole country. The excellent work and commitment of the whole staff of St. Gabriel's Hospital for the patients under the guidance of its Hospital Director are the most important factor for the good results and the role this hospital plays within the Malawian health system. We give sincere thanks to everybody working for St. Gabriel's Hospital. I am happy that I could see the motivation of the staff during two meetings which I had with the representatives of staff.

The excellent hospital infrastructure with modern medical equipment is the basis for high quality medicine. The solar system which was again extended recently guarantees that the hospital is able to offer its service in times of power shortages.

In 2017 again many visitors came to Namitondo to learn about St. Gabriel's. The hospital is very happy to receive guests from different parts of the world as they are ambassadors of the hospital when returning home.

On behalf of Foundation Ste Zithe and on behalf of the Board of Governors I do thank all donors from different parts of the world who have generously supported St. Gabriel's Hospital in 2017. Besides those who have donated in cash or in kind we do also thank those who worked for St. Gabriel's Hospital on voluntary basis. These doctors, nurses and technicians are always welcome in Namitondo. We

thank them for their motivation and excellent work for the patients and the hospital.

Last but not least I would like to express our thanks for the support of the Archbishop of Lilongwe and the Government of the Republic of Malawi.

Dr. HANS JÜRGEN GOETZKE
CHAIRPERSON OF THE BOARD OF GOVERNORS
LUXEMBOURG, MARCH 28TH, 2018

EXECUTIVE SUMMARY

Services

The statistics of 2017 are similar to 2016 with a notable reduction of admissions in pediatrics due to an increase in primary care centers around the hospital (government Health centers and village clinics by Health Surveillance Assistants) where disease conditions are treated early thereby reducing need for admissions.

Below is the summary of the statistics- January to December, 2017 in comparison to the past five years.

Department/Year	2017	2016	2015	2014	2013
Outpatient	49065	47453	57348	55190	40359
Total Admissions	14232	16305	17435	17608	14259
Paediatrics Adm.	4890	6435	7193	7392	5416
Intensive Care Unit	178	98	84	-	-
Surgery Adm.	1184	1316	1198	1093	943
Us scan	5154	4766	4733	3198	1145
Endoscopy	538	773	784	751	342
Deliveries(Birth)	3318	3632	4134	4057	3513

NB: -Notable difference is reduction in the pediatric admissions. There has an huge increase in ICU admissions because improved care of the critically ill patients who are admitted in ICU

Energy

Solar is the main source of power in the hospital. ESCOM has been scarcely available.



NB: Above is an example of the solar panels (female ward) and SMA Inverter (administration building).

SERVICE LEVEL AGREEMENT (LILONGWE AND MCHINJI DISTRICT ASSEMBLIES)

The hospital has maintained its service level agreement with the two districts for maternity and pediatric patients with the government. There is a new Service Level Agreement with UNICEF for Malnourished children started in fourth quarter and continuing.

FINANCE

The Hospital has realized a surplus of MK2, 969,599.10

VISITORS

- Arch Bishop Tarsizious Ziyaye of Lilongwe Arch Diocese visited the hospital in second quarter of 2017
- Anke Engelke who donated drugs and laboratory equipment visited the hospital in third quarter

CONCLUSION

Management would like to express its sincere gratitude to all partners who support the hospital without them services would not be provided to patients as shown. The poor people around in Lilongwe and Mchinji districts continue to access affordable health services due to support from partners.

Dr Phyela S.K.J. Mbeya
HOSPITAL DIRECTOR

MEDICAL DEPARTMENT

Out Patient Department- see table below

Year/Section	2017	2016	2015	2014	2013
General	27611	25963	39805	36782	22364
Private	2034	3753	2733	2551	1822
HIV/AIDS Clinic	15131	14797	15277	14341	14638
Hospice	4289	2940	1115	1516	1537
Total	49065	47453	58930	55190	40361

NB: - The outpatient attendance is slightly more than last year at 49,065 in 2017 and 47,453 in 2016

Inpatient (admissions)-see table below

Year/ward	2017	2016	2015	2014	2013
Male	1494	1612	1592	1589	1412
Female	2743	2852	2971	2897	2579
Paediatric	4890	6435	7193	7392	5416
Surgical	1184	1316	1198	1093	943
Maternity	3318	3560	3961	4002	3494
Hospice	389	284	255	302	190
Private Wing	217	246	273	333	225
Intensive Care Unit(ICU)	178	98	84	-	-
Total	14410	16403	17519	17608	14259

NB: -The admissions dropped by due to increase in primary care centers (health centers and village clinics) in the catchment where diseases are treated early there by reducing need for admissions. The notable reduction is in pediatrics where disease screening has been intensified.

The Intensive Care Unit

- The Intensive Care Unit is new ward for critically ill patients. It started in 2015 with few Medical equipment. Since last year it has a ventilator for CPAP and intubation.
- The numbers of Admissions have increased by 82% because of increased care by doctors of critically ill patients who in the past would be referred to Kamuzu Central Hospital.



NB: - Above is the ICU ward and Ventilator for supporting breathing in critically ill patients. The ventilator was donated by Draegerwerk in Luebeck, Germany. The donation was facilitated by Dr. Peter Nitschke (see report).

Inpatient days stayed

Ward/Year	2017	2016	2015	2014	2013
Male	4418	8359	7137	9544	8572
Female	7324	11566	9534	10084	10230
Paediatric	14947	18968	28872	24659	20029
Surgical	5001	6484	5888	6492	6490
Maternity	10514	12447	11345	10264	9573
Hospice	1927	1285	3426	1591	2260
Private	418	839	882	1138	1018
Total In patient days stayed	44549	59948	67084	63772	58173
Hospital Bed Occupancy Rate	42%	57%	63%	60%	55%

NB: - The bed occupancy rate dropped to 42% because of short stay in hospital of pediatrics, adult males, private and maternity. It shows admitted patients stayed fewer days in hospital. In pediatrics the current treatment (Artesunate plus LA) for malaria allows children to be discharged early unlike quinine in the past. Women who have had caesarean section are discharged on day 4 now unlike in the past when they were discharged on day 7-10. In general admissions especially for pediatrics have reduced due scaling up of disease screening in the community by public health department.

Maternity Statistics- see table below

Year/statistic	2017	2016	2015	2014	2013
Deliveries	3346	3632	4134	4057	3513
SVD	2525	2639	3010	3030	2584
Caesarean Section	762(23%)	880(24%)	762(18 %)	820(20%)	673(19%)
Vacuum Extraction	47	48	182	102	86
Breech	75	65	120	105	77
Maternal Death	7(209MMR)	3(82 MMR)	2(48MMR)	2(49 MMR)	5(142MMR)
Macerated Still Birth	41	40	47	39	35
Fresh Still Birth	48	39	59	57	63
Neonatal Death	22	33	40	49	44
Twins	195(6%)	204(6%)	168(4%)	137(3%)	117(3%)

NB: - There has been a reduction in number of deliveries which is due to new maternity services (two health centers) opened in the catchment area. Some women with normal child birth are attended at these centers. Caesarean Section has increased because the hospital is still the only place for major operation in a 40 km radius. There has been an increase in maternal deaths due to late referrals with puerperal infections and obstetric bleeding.

Key maternal and neonatal indicators compared to national statistics

Statistics 2017	St Gabriel's hospital	National
Maternal Mortality Ratio(MMR)/100,000 deliveries	209	634
Neonatal Mortality Rate(NMR)/1000 live births	6.5	21.8

NB: - The table above is the comparison of **MMR** and **NMR** for the hospital and national figures. The hospital continues to operate above average.

The substantial decrease in neonatal deaths is due to intensified training of members of staff in neonatal care. The hospital continues to implement interventions to reduce mortality further in both neonates and mothers.

The figure below shows the CPAP machine in use (*The hospital received CPAP Machines as part of the donation from Action Medeor, Germany*)



HIV/AIDS SERVICES

HIV Testing and Counselling

General

Category/Year	2017	2016	2015	2014	2013
Clients precounselled	19722	2430	7557	8085	7522
Clients tested	19722	2430	7557	8085	7522
Clients reactive	725(3.6%)	309(13%)	471(6%)	489(6%)	656(9%)
Clients post counselled	189997	2430	7557	8085	7522
Discordant Couples	30	17	27	26	12

NB: - The figures are from the hospital HIV testing services for inpatients and outpatients. The number of those tested increased 8 times due to scale of HIV testing services. Take note that the prevalence is at 3.6% because the hospital now intensified testing in the villages unlike in the past when

largely only patients admitted were tested. The national prevalence of HIV positive population is now at 11 %.

HTC for PMTCT

Female/year	2017	2016	2015	2014	2013
Bookings	2411	4223	3324	3338	3421
Tested	2411	3002	2809	3391	3304
Reactive	29(1.2%)	55(1%)	31(1%)	43(1%)	55(2%)
Male/Year			2015	2014	2013
Tested	1187	1018	769	737	738
Reactive	21(1.7)	17(1.5%)	7(1%)	8(1%)	17(2%)

NB:-The prevalence among antenatal mothers/clinic remains at less than 2 %.

Patients on ART (Adults)

Category/Year	2017	2016	2015	2014	2013
Ever started	246	298	309	392	439
Alive	239	269	279	359	387
Died	0	8	7	10	4
Stopped	0	0	0	0	3
Absconded	0	2	7	16	19
Transferred Out	7	19	11	7	26

Patients on ART(Children)

Categories/Year	2017	2016	2015	2014	2013
Ever started	12	15	29	28	31
Alive	11	13	26	27	25
Died	0	0	0	0	2
Stopped	0	0	0	0	0
Absconded	0	0	1	1	2
Transferred out	1	2	2	0	2

NB: - Currently, Test and treat approach is used to treat patients, that is, all patients are started on treatment as long as they test positive for HIV.

PUBLIC HEALTH CARE

Service	2017	2016	2015	2014
Fully Immunized	452	442	520	304
Pentavalent	497	1305	1659	870
Polio	496	1288	2958	2466
Measles	453	750	570	297
Vitamin A	1230	784	2454	2565
BCG	2249	2833	2466	1662
Underweight	191	158	218	37
Normal Weight	7982	104299	13462	4684
Total Weight	8173	104457	13672	4721

NB: - There was massive screening and vaccination in 2016 for malnutrition hence reduced figures in 2017 because most were done in 2016.

Nutritional Rehabilitation Unit (NRU)

Statistic/Year	2017	2016	2015	2014	2013
New Admission	154	158	307	277	248
Re-admission	6	4	20	12	12
Total cured	135	147	296	258	221
Defaulters	6	11	6	7	6
Deaths	20(14%)	10(6%)	11(4%)	18(7%)	29(12%)

NB: - There has been an increase in deaths from 6% in 2016 to 14 % in 2017.
Audit will be done on the deaths to determine main causes of death.

SUPPORTIVE SERVICES**Laboratory**

Tests/Year	2017	2016	2015	2014	2013
Biochemistry	6650	7645	3489	3151	2022
Microbiology	1636	2076	2112	2390	2856
Parasitology	13461	15242	19105	21289	6271
Haematology	13737	16892	12614	16331	12456
Serology	2066	1365	1507	2165	1628
Total	37550	43220	38827	45326	25233

NB: - There was a decrease in all tests due to the decrease in pediatric cases. The main disease reduction was malaria cases hence a decrease in hematology and parasitology.

X-ray Department

Category/Year	2017	2016	2015	2014
Exposures	8612	9619	10907	11033
Examinations	4684	5156	4227	5092

NB: - The number of x-ray examination has been decreased in 2017 because the x-ray machines in district hospitals were mostly functional.

Top Five Diagnoses- Outpatient Department.

1. Malaria
2. Respiratory Infections
3. Chronic Medical Conditions e.g. Hypertension
4. Musculoskeletal pains
5. Surgical conditions

Top Five Diagnoses-Inpatient Department

1. Malaria
2. Respiratory Infection including Tuberculosis
3. Chronic Anaemia
4. Surgical Conditions
5. Gynaecological Conditions

NB:- A significant number in 2, 3 are HIV positive and are started on Anti-retroviral Therapy.

SPECIALIST SERVICES

**Peter Nitschke MD [Dr. Peter]
Internist**



**Saint Gabriel's Hospital
Private Bag 1, Namitete
Lilongwe/MALAWI**

Report Internal Medicine St. Gabriel's Hospital 2017

Herewith I report as the Internist of the St. Gabriel's Hospital about my medical activities in 2017 - especially about the Departments for Ultrasound and Endoscopy. In this year I have been present at St. Gabriel's Hospital 35/52 weeks.

Ultrasound	2013	2014	2015	2016	2017
Examinations	1145	3148	4733	4766	5154

Endoscopy	2013	2014	2015	2016	2017
Examinations	342	751	784	773	680

Ultrasound Department


In **2017** we, MO Dr. Wilfred Dzama & CO Hannock Banda (since 02.2017) & me have performed about **5154 USS** [Ultrasound-Scannings]. Compared with last years the total amount of USS rised again: **2013:1145 -> 2014:3148 -> 2015:4733 -> 2016: 4766 --> 2017: 5154**. That's a proof, that referring colleagues from outside, near and far and as well from inside, our hospital itself, are getting more and more well acquainted with the advantages off this method. And patients themselves like to undergo USS - not seldom on their own wish.

After taking patient's history and performing physical examination, USS can be the next step for to peer easily inside the body and check what's the matter with the abdominal-, pelvic-, thoracic organs and neck, extremities, blood vessels, heart,

obstetrics etc... Throughout this year we have been mostly 3 USS-colleagues. **In times of annual leave, illness or job changing and for to intensify the training, we need 1 or 2 colleagues more as a reserve.** This will help us representing each other more easy, to diagnose more accurately/reliably and to avoid control-examinations. Up to now 'Abdominal-USS' is still the most popular examination among the ultrasonographers, in contrary to echocardiography and Doppler-examinations(carotid-/vertebral arteries, peripheral arteries of the legs) which are not as often needed but not less important, esp. because in Malawi there are only few facilities which perform it.

We are still using the 2 very valuable and good functioning Toshiba-Nemio USS-Machines, which I provided for the Saint Gabriel Hospital end of 2015. They were donated 1.)by the Bundeswehr[BW]-Depot Sigmaringen - facilitated by my friendship to a colleague and 2.)by the Community Hospital of my hometown Balingen, where my wife is working and asked for it. The last mentioned machine has been lent out up to now to Dr. Klaus Flohr. But unfortunately we had to take it back last days as our 3.)extraordinary 'High-Tech'-USS-machine, Hitachi EUB 8500 - donated by Father Willem Kerkhof 2013, is no more working properly. If ever it can't be repaired by our technicians, it can be substituted by a new Device: Mindray Colour-Doppler TYP M-7/SR, which I bought March 2017 for around 38.900 €, from the money I collected from donations of my circle of very sympathetic friends and good acquaintances. With this machine it will be possible, to examine adults as usual and especially newborns and very young children much better as ever before. The Mindray will arrive next days in Namitete. With all the mentioned machines bedside USS is possible anytime. Additional there is a further USS-Device - Sonoscape from 2013, a present of the German Embassy in Lilongwe for to facilitate my start in SGH. It is in the meanwhile installed at the HDU - and there it is used frequently, esp. for surgical and emergency patients.

Some of the most frequent and important USS-diagnosis we made e.g.: NORMAL = "Nothing abnormal detected NAD"(1298), Goiter(46), Musculo-Skeletal-Pains=MSP(572), Pyomyositis(16), Abscess s.c.(31), Tetralogy of Fallot TOF(13), Cardiomyopathy hypertrophic/dilative(398), Pericardial effusion(40), Relevant Heart valve disease \geq II°(52), VSD/ASD/PDA(21), Pleuritis/pleural effusion/empyema(142), Pneumonia /Bronchopneumonia(96), Unclear Consolidation/ InfiltrationLung/Tb?(43), Liver-cirrhosis (133), Schistosomiasis of Liver(86),Livercell-Ca(84), Hepatic abscess(6), Thrombosis portal+splenic vein(12), Cavernous Transformation Portal Vein CTPV(6),

Once more I want to repeat my wish for the coming year

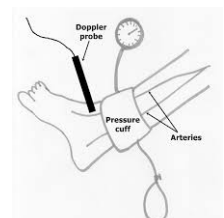
1 or 2 Doctors/Clinicians more should be trained in USS because of the daily workload.

ie more of us know USS, the better patients can properly and earlier diagnosed and we will

Isolated Splenomegaly=ISS=HMS(260), Miliary spleen Tb/HL(44), Generalized –isolated – Lymph-adenopathy(42), Traumatic rupture spleen(20), Cholecystolithiasis(78), Distal occlusion CBC(14), Pancreaticolithiasis(15), Pancreas carcinoma/Tumor(14), Susp.PUD/Ulcus duodeni/ ventriculi(34), Outlet stenosis of Stomach(34), Stomach Cancer+local metastasis/infiltration (32), Acute enteritis(36), Colitis(41), Typhoid(108), perforated Typhoid(22), Isolated Lymph-adenopathy(64), Suspected peritoneal Tb & susp. Ileitis/Ileocolitis/tuberculosis(99), Abdominal tumor mass(28), Colon carcinoma/verified(16), Intraabdominal abscesses(18), Acute nephritis(146), Hydronephrosis(151), Oncocytoma(1), Uretero-Pyelo-Lithiasis+Cystic Kidney(13), Renal Cell Carcinoma RCC(10), Papillomatosis of bladder/Schistosomiasis(3), Tumor/Cancer urinary bladder(3), Prostate Ca(25), Mamma abscess(4), Mamma Ca(6), Uterus fibromatosus(53), Tumor of ovary(16), Unclear pelvic mass(11), Polycystic ovarian tumor(21), Uterine cervix Ca-Metastasis(43), Haematocolpos(metra/salpinx by imperforated hymen(4), Pregnancy/Measure-ments(529), Pregnancy Twins(42), Extrauterine Gravidity(19), Molar Pregnancy(10), Intrauterine fetal death IUD(35), Control threatening abortion/after abortion(345)

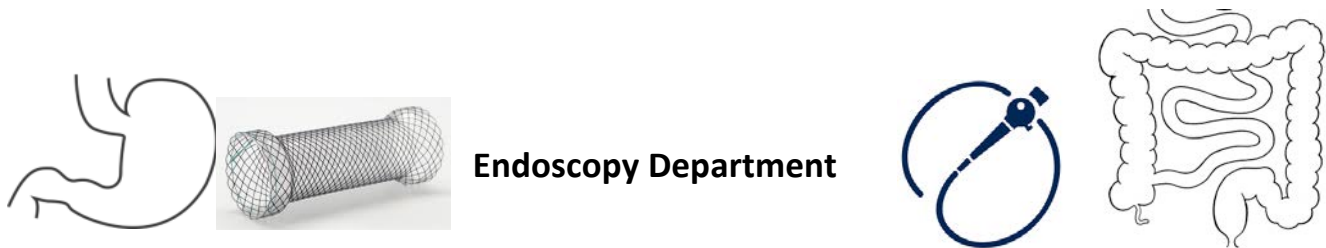


ECG and Bidirectional Doppler-Ultrasound Probe



Our very new 12-channel **Electrocardiograph** Nihon Kohden, Modell ECG 1550, which we obtained 2016 by a countrywide campaign in Germany of myself together with Medeor, is winning more and more acceptance and helps us to assess cardiac arrhythmia and other acute and chronic heart diseases. But the problem is how to treat the arrhythmia without suitable medicaments? My attendant Gift Kalipinde became in the meanwhile the master of this ECG-machine and can perform ECG anytime, as well bedside. The interpretation of the ECG can be done by Dr. Dzama and myself.

For to assess the relevance of an arteriosclerotic stenosis in the periphery, e.g. feet, or in the carotid arteries, our new **bidirectionalDoppler Ultrasound-Device with a 4 Mhz Probe** can be very helpful. It is as well useful for to detect deep veins e.g. for to take blood sample, or to fix a cannula and it can be used bedside. Gift Kalipinde can assist anybody who needs this device which is kept in room 14. -- I purchased this Doppler US-Device from Elcat GmbH in Wolfratshausen and it has been paid by the donated money of my circle - costs 1211 €.



In the year 2017 I performed on my own in total 680 endoscopies and interventions: Hereof 602x oesophago-gastro-duodenoscopies respectively “**gastrosopies**”, 48x colonoscopies, 21x Bandings/Ligations of oesophageal varices, 6x oesophageal stenting of oesophageal carcinoma and 3x retrieval of foreign bodies tucking in the oesophagus. Mostly endoscopies are done on Tuesdays and Fridays, in emergency cases anytime, as well at night or weekends. Compared with 2016 there is a decrease of 93 exams [2013/-14/-15/-16/-17: 342/751/784/773/680].

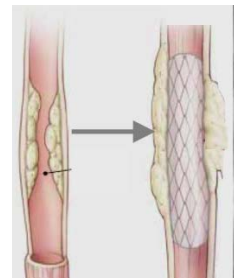
Colonoscopies were done 48x, some more as the years before [2013/-14/-15/16: 8/29/36/36/48]. In nearly all cases the coecum and terminal Ileum could be reached - but not so if a tumor obstructed the lumen. Summed up, the total amount of endoscopies has been less as the last years. There is no explanation to find - may be the elevated prices play a role.

With our well trained and motivated endoscopy-team am very content and I hope vice versa with me too. Even in difficult procedures they keep serenity. Beside their commitment to the patients and their intensive care on the accurate cleaning and disinfection of the endoscopes is of utmost

importance. It is accordant to the international instructions for manual cleaning procedures. Of course it's a burden for our team to relinquishing a frequent occurrence on official lunchtime, but the amount of patients and their quite often very critical health condition doesn't allow to postpone the exams. So I like to say thank you to the endoscopy team and as well to the very cooperative staff at the reception.

In the meanwhile **Ligation=Banding of oesophageal varices** is a routine procedure and had to be performed in 2017 around 22 times (as 2016) - half of them in a life-threatening situation resp. with severe blood loss caused by massive oesophageal variceal bleeding. Several times acute interventional variceal banding stopped immediately spurting bleeding and saved the life of our patients. In our setting oesophageal varices are mostly caused by advanced Livercirrhosis or Liver-Schistosomiasis. Technically we use for the banding procedures the so called Euroligator, which I purchased twice in 2016 and 2017 (together 2000 €) from donated money in Oberderdingen near Pforzheim/Germany from Dipl. Ing. Helmut Wurster - who trained me as well in this technique.

Oesophageal Cancer is a is a horrible disease, which occludes slowly the lumen of the oesophagus of the patients, causing thirsting and starving to death, even the saliva can no more be swallowed. **Malawi is the country with the highest rate of oesophageal cancer in the world.**



In the Saint Gabriel's Hospital 10 % of the patients undergoing endoscopy are suffering from this disease. From my start 2013 here in Saint Gabriel's Hospital I have been demoralized because of the poor help we could offer – it's nearly always too late for an operation. Mostly patients come here in an advanced stage of oesophageal cancer. Reasons for that are prevailing poorness, lack of money, only few endoscopy-facilities in the country resulting in often very, very far distance e.g. from here - In the majorities of the cases - nearly always - only palliative help is possible. Best

in this stage is - if possible - to apply an oesophageal stent in the resting lumen - that's a tube which can be inserted into the oesophagus and reopens the occluded lumen and allows natural swallowing again - up to 1 year±. By a special chance in 2013/2014 I could provide around 75 oesophageal stents - donated from a charitable institution - and send the patients with these stents to my cooperative colleague Dr. C. Kajombo in KCH for to apply them. Beginning of last year I started to do it on my own and purchased from above mentioned money - which I got from donators, ≈ 20 oesophageal stents in Asia (250 \$ per Stent) - but the handling and quality wasn't as solid. Anyway --> with the friendly supportive instructions and help from my colleague Alexander Thumbs from Würzburg/Germany we started successfully with oesophageal stenting. And last but not least I got a really charitable and generous offer for suitable stents from a German merchant - having a heart for Malawi - so I could buy last October 150 suitable oesophageal stents from the above mentioned money, donated by fundraising from our understanding, **generous and big-hearted donators** - for around 12.000 € - including shipping - an amount of stents which should be enough for 2 - 3 years.... This is need as we diagnosed 2017 oesophageal cancer 72 times - more than ever since 2013. From this money and by personal charity from an enterprise in Bavaria we could provide as well new instruments, e.g. Grasping - forceps and baskets for to remove foreign bodies out of the oesophagus, mostly in children which favour to swallow 5 and 10 Kwacha coins. Even a screw-cap of a plastic-bottle, swallowed by a very thirsty - adult - person, could be removed like this in the last days.

Some of the most frequent and important Endoscopy-Diagnosis we made 2017

OESOPHAGO-GASTRO-DUODENOSCOPIES: Normal Findings(201), Irritable Stomach(26), **Gastric Axial Hernia /Incompetency of Cardia (26)**, **GERD-Gastro-Oesophageal-Reflux-Disease(14)**, Benign oesophageal ulcers(11),

Oesophageal + Fundal varicosis ///BANDING(33///22), Stenosis of Oesophagusby Cancer///STENTING(72///9), Oesophageal Candidiasis(74), Achalasia/// Dilatation(2///2), Globus pharyngis(18), Susp. benign submucosal oesophageal tumor (eglipoma/leiomyoma)(3), Gastritis/Duodeno-Gastral-Gall Reflux(94), Melonlike erosive Gastritis(3), Congestive Gastritis(6), MenetrierDisease(2),PUD Ulcusventriculi(17), PUD Ulcusduodeni(61), Gastric Cancer(22), Gastroduodenal Kaposi Sarcoma (susp.)(1), DudenalTumor(1), External duodenal compression by extraluminaltumor(2), **MISCELLANEOUS: Epipharyngeal bleeding(2), Endoscop Intolerance(1), **Foreign Bodies in the Oesophagus -- >RETRIEVAL(3///3)**, Epiglottis Cancer, Cancer of vocal cords, Massive Papillomatosis of vocal cords(2), Oro-Pharyngeal Cancer(5), Compression of Stomach/Oesophagus by external Tumor(2)**

COLONOSCOPIES: Normal Findings(9), Anitis(2), Haemorrhoids(6), Hypertophic Anal Papilla(3), Anal fissure(1), **Polyp supraanal/rectal(2), Adenocarcinom Colon asc/rectal(4), Kaposi Syndrome of Colon(1), Rectosigmoiditisaphtosa/ulcerosa(6)** Diverticulosis(5),

The efficiency of endoscopy procedures depends on the visual assessment of the findings, but and as well crucially from the available accessories for to act endoscopically when there is an intervention need. Up to now our equipment of accessories has been rather poor - this changed since I contacted **Ilona Jacobi/Carmonja GmbH** and informed her about our problems. She understood us and decided spontaneously to assist us and donated to our hospital quite an amount of extraction bags+forceps, oesophageal balloon dilators, biopsy forceps, disposable snares, guidewires, biopsy traps, stethoscopes, dental set, surgery pack.... this has arrived last days with the Container-Transport. Thanks to her and her charitable attitude!

During my regular 4-weeks holidays 4x/year there is a problem to perform endoscopies in this time. In spite of my certain reserve it should be possible, that experienced colleagues, if present in this time, can act for me. A precondition should be a sensible, cautious handling of the endoscopes. Once, 2014 and 2015 we had troubles with these very sensitive instruments and they had to be repaired - a very time- and money-consuming procedure. Our MO Dr. Dzama is still interested in the endoscopy-technique and I am hopeful that he soon will perform more endoscopies - it's a question of time.

Additionally, I want to mention once more, that we are since 2017 capable to remove intestinal polyps with an **ESU** = Electrosurgical Unit. This machine + additional equipment(loops/snares,needles.) costs 18.200 \$. After charitable 50 % price reduction from the Enterprise Karl Storz in Germany (Frau Dr.h.c.mult. Sybill Storz donated our Endoscopy Unit 2014) the rest of 9000 \$ has been donated by Mr. Patrick Denis, my patient from Lilongwe.

The **HDU** (high dependency unit = intensive care unit without ventilator) has been activated 2015, after me and my wife could provide - with the help of Caritas Cloppenburg - the needed monitors and accessories for control of Blood pressure, Heart Rate, Oxygen saturation etc. After a while it was medically need, to extend the capacity of the HDU and equip it with a **ventilator** and turn into an ICU. Luckily I could find help from the German Enterprise Draegerwerk in Luebeck. This Enterprise is worldwide known and practises beside technical activities/production real social responsibility. Madame Claudia Draeger, the Corporate Director with a very charitable attitude, responded on my request and decided after some correspondence and technical discussion with Mr.Donnex Paipi, our Anaesthetist, to donate us the ventilator: Savina 300 with a worth of nearly 39.000 €. In the meanwhile this practical and robust ventilator has helped quite a number of patients to survive in very critical health conditions. We all are very thankful

to Madame Claudia Draeger for this important and effective extension of our HDU.

Dr. Peter

Some of my 2017 background activities for Saint Gabriel's Hospital when am at home

2017-01-10	Presentation SGH Lions Hillary Club Balingen/Germany(Hometown)
2017-01-12	Interview Newspaper of my Hometown Balingen about SGH
2017-10-05	Secondary School of my Hometown Presentation about SGH
2017-10-17	Secondary School of Tailfingen Advent-Collection for SGH
2017-11-01	PUMA - Sports-Equipment FC-SGH Namitondo
2017-12-02	Circle-Letter about my activities in SGH -
2017-12-24	Interview Newspaper of my Hometown about SGH-Activities
2017-12-24	Campaign for fundraising for SGH since 4 years regulary - with my very dedicated Friend J. Feyrer(>2013)

2017 Diverse:

1. In 2017 during my leaves 3 x visiting Enterprise Karl-Storz-GmbH Tuttlingen because of problems/repairment of endoscopes and missing/replacement of spare parts - this enterprise is supporting us very much and am very thankful to them - esp. on behalf of our patients.
2. 1 x visiting Enterprise Karl Wurster in Oberderdingen/Pforzheim/spare parts for Euroligator(Banding-Device)
3. 2x visiting Dormed in Stuttgart 1.) for Selection of Mindray US-Machine and 2.)1x for Training

II. Surgery- Dr. Zierer

During the year 2017 a continuous surgical care of the patients in St Gabriel's hospital was not possible. From mid-march until mid-October various short-time-surgeons were here and there were some periods without surgeons. This fact is due to two problems. First of all the surgical training in the highly-developed medical countries of Europe is meanwhile divided in many divisions so a general

surgery doesn't exist anymore, therefore no young surgeons with knowledge in general surgeries are coming. In the developing countries however surgeons with basic and advanced knowledge and – not least – experience in several branches of surgery are needed while at first the highly-expensive special equipment is not in stock, and secondly the training-level of the staff is lower and the number of needed personnel not available. Due to this state of medical training the quantity of suitable surgeons is more and more reduced – above all of senior surgeons. Secondly these senior surgeons don't want to take over any longer professional activity in these countries because of family, personal or physical reasons all the more because the job is particularly very stressful under these conditions. The future will show how this problematic complex can be solved.

Two organizational steps of the management of the hospital in the last year have shown really positive effect for the quality of work: the principle of rotation of the staff through the various departments was changed in favour of a longer stay in the departments. This allows the development of continuity in the treatment with treatment pathways and longer training of skills of the staff. The result is a continuous improvement in the treatment quality. As second step a Malawian physician, Dr Darwin Nyirenda, is now working constantly in the surgery department. A personal training of surgical skills and operating methods is now possible. Dr Darwin Nyirenda is regularly assisting major surgical procedures and doing independent minor and average procedures. Another advantage of the additional physician is the possibility to supervise and control the treatment of the OPD patients with procedures in the theatre at the same time.

The following statistic of patients is related to the time of the middle of October to the end of the year. For the rest of the year no data are available for the surgeon – because of the above mentioned reasons.

During these nine weeks altogether 131 surgical procedures were done in the theatre not included the minor procedures in the OPD done in local anesthesia or in a short anesthesia with ketamine. This data related to one year means about 750 procedures/year and about 3 procedures/day of different rank of difficulty. This is at present the upper limit of the personnel capacity and of the capacity of one theatre for the surgery. Beside the theatre the surgical team must take care of the wards, the OPD patients and the patient to book.

General surgery

The most procedures were as every year hernias in every age group of the patients. The peak of male patients between 20 and 30 y was caused by two severe sick patients with complicated healing process. The male patients over 50 years had mainly prostate hypertrophy and tumors.

Trauma Surgery

The peak in the childhood is caused by many fractures due to falls from trees or from vehicles, mostly bicycles. In the elder ages the fractures are caused by road traffic accidents.

Some problems are the same as last year. The mobile x-ray machines are very susceptible to breakage. Only one machine is working since a long time. Therefore all repositions of fractures must be done in the theatre as last year. As last year reported a new sterilizer with a horizontal design was purchased so we had two 'new' sterilizers. After a short time of working both sterilizers were faulty and a repair was necessary. Unfortunately both 'new' sterilizers were only a short time working after repair so a second repair was necessary. At the moment the oldest one and one of the new sterilizers are only working. A big disadvantage for us is that the repair times are long because spare parts and the technician must come from Europe. For the future the bone surgery should be better equipped as the patients with fractures are arising. In the theatre a new operation table with extension device is necessary.

III. Obstetrics and Gynecology- Dr Klaus Flohr

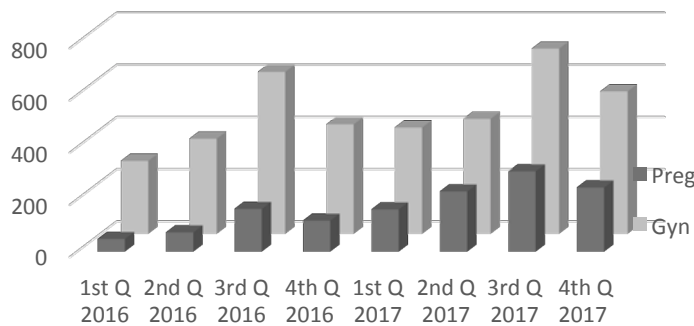
Hospital report of 2017 Gynaecology and Obstetrics at SGH

As from the 1st October 2015 specialised Gynaecological Services are offered at

SGH on a permanent basis.

Room No 22 in the OPD section now houses two cubes with simple, basic equipment to do gynaecological examinations and basic Ultrasound exams simultaneously. With the help of a specially trained staff patient-attendant and a full-time clinical officer we were

Fig. 1: Attendance room 22

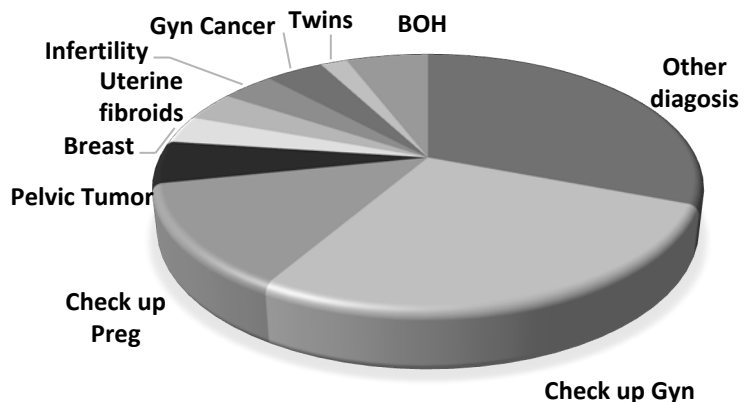


able to attend to 3060 patient-contacts in 2017 with a wide range of gynaecological and obstetrical diagnosis (see Fig.2)

We have established a good working-relationship with a Pathology-Laboratory in Lilongwe so as to do PAP-smears and have samples examined. We are also thriving to join the nation-wide program of early detection of cervical cancer by Visual Inspection with Acid in a “see – and – treat” setting.

On two days of the week we do elective gynaecological surgery - 315 cases in 2017 and we shall thrive to make waiting-time for patients more bearable. See FIG 3 for the different kind of procedures. So as to enhance hygiene in theatre we were able to introduce specially designed re-usable theatre-gowns.

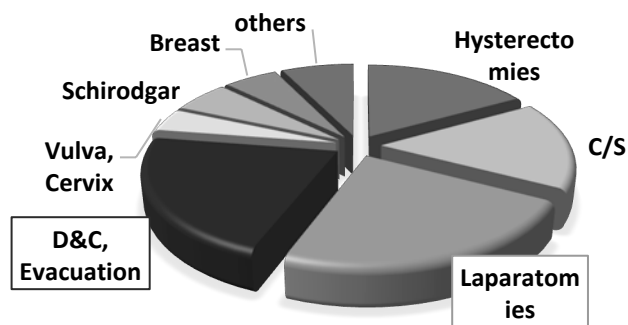
FIG. 2 DIAGNOSIS ROOM 22



Besides our clinical work we were busy planning for an extension and renovation of Labour-ward and theatre with the new establishment of a Neonatal Care Unit and hope to start constructions in mid-2018.

The obstetrical statistics are shown in the general section of this report.

FIG. 3 GYN PROCEDURES 2017



NURSING DEPARTMENT

INTRODUCTION

Nursing continues to offer quality services to the community surrounding St Gabriel's Hospital. The department has Fifty Seven (57) Nurses. Outlined below are the nursing activities:

- **ANTENATAL CARE**
- **PREVENTION OF MOTHER TO CHILD TRANSMISSION**
- **MATERNITY CARE**
- **PRIMARY HEALTH CARE**
- **NUTRITION AND REHABILITATION**
- **HIV TESTING AND COUNSELLING**

ANTENATAL CARE

This is offered both static and outreach by community health nurses and support staff

Antenatal care ensures that the mother and fetus survive pregnancy and child birth in good health.

In the year 2017, four thousand seven hundred and five (**4705**) mothers accessed antenatal care for both static and outreach clinics. This is low as compared to two previous years where by **5531** were for 2016 and **6879** for 2015. The assumption is that mothers are visiting neighboring hospital child legacy and maternity clinic in Walilanji.

The table below shows antenatal statistics for 2015, 2016 and 2017

category	2015	2016	2017
Total visits	6879	5531	4705
1 st Trimester	236	167	108

PREVENTION OF MOTHER TO CHILD TRANSMISSION (PMTCT)

It is a global goal to have an HIV free generation and this is implemented through PMTCT, whereby every pregnant couple attending antenatal should have their HIV status established.

In 2017, two thousand four hundred and eleven (**2411**) mothers and one thousand one hundred and eighty seven men (**1187**) whose HIV status was not known were tested. Out of **2411** mothers, **29** tested positive representing **1.2%** and **21** men tested positive representing **1.7 %**,

As shown in the table below:

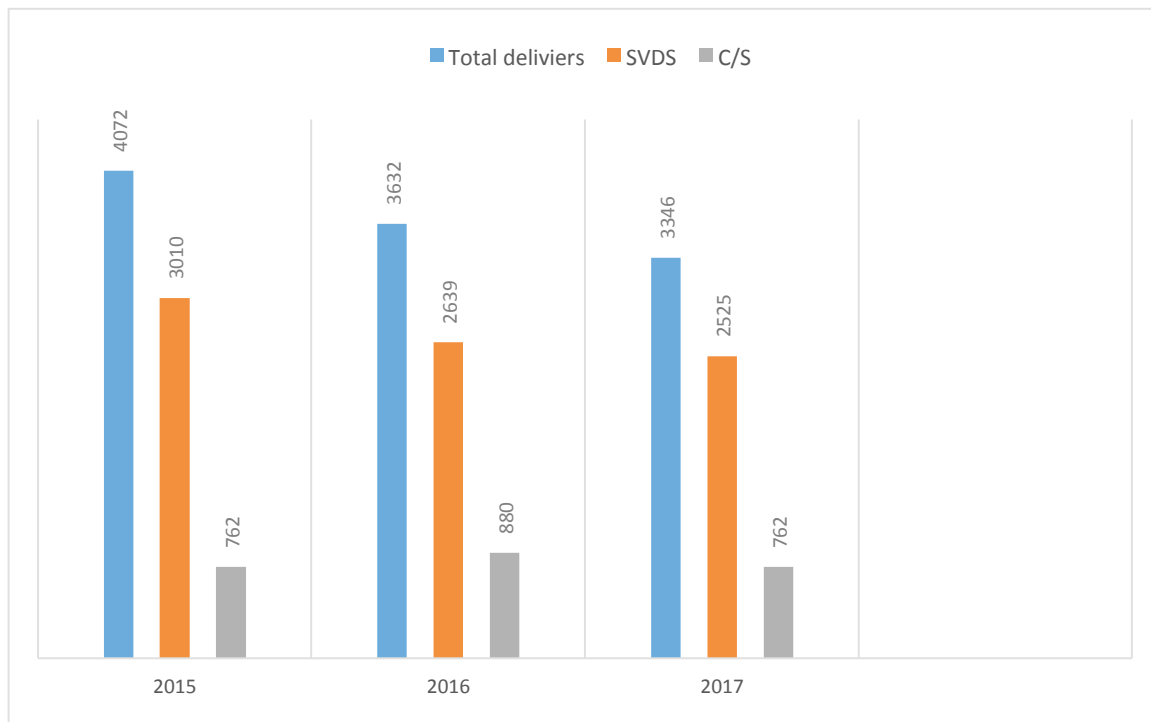
PMTCT-UPTAKE

Category	2015	2016	2017
Total female booking	2810	3002	2411
Female HIV negative	2778	2947	2382
Female HIV positive	32(1.1%)	55(1.8%)	29(1.2%)
Total Male Booking	769	1018	1187
Male HIV negative	762	1001	1166
Male HIV positive	7(1%)	(1.6%)	(1.7)

The table above shows similar trend in infection rate among men and women attending antenatal care. The table also shows a positive impact on male involvement in PMTCT services.

MATERNITY CARE

St Gabriel maternity has been busy as usual caring for laboring women, sick neonates and postnatal mothers. In 2017, three thousand three hundred and forty six (**3346**) were the total deliveries through different modes. Out of this total, 195 were twin deliveries. The figure below illustrates trends in deliveries for 2015, 2016 and 2017.



There is a slight decrease in the trends of deliveries due to the presence of Child Legacy Hospital Labour ward and theatre for caesarean sections.

MATERNAL DEATHS

The hospital regrets to lose seven women in 2017. Three mothers died of postpartum hemorrhage due to DIC (Disseminated Intravascular Coagulation), ruptured ectopic and retained placenta, two mothers died of puerperal sepsis after delivering at a health center and two died after going into cardiac arrest following caesarean sections. Action plans has been developed and some implemented to avoid future occurrence of these deaths.

FRESH STILL BIRTHS

In the year 2017, labour ward recorded **48** still births. This is attributed to intrauterine deaths, antepartum hemorrhage, cord prolapse, congenital anomalies, sepsis, and severe birth asphyxia. Major contributing factor identified through audits being delay in reporting to the facility due to transport problems by referring health centers.

NEONATAL CARE.

Despite having no nursery ward, the sick neonates are being cared for within labour ward. In 2017, three hundred and twenty four (**324**) neonates were admitted due to sepsis, birth asphyxia and others. Some of these admissions were referred in from surrounding health centers. Maternity recorded **22** neonatal deaths; asphyxia being the leading cause of most of these deaths.

KANGAROO MOTHER CARE (KMC)

KMC is important to keep stable premature babies warm as to prevent deaths due to hypothermia. In 2017, one hundred and seventy six (**176**) premature babies were cared for in KMC. Out of these admissions, **123** were facility initiated and **53** transferred in from referring health centres. One hundred and fifty eight (**158**) were discharged alive, twelve (12) died, three (**3**) absconded and **3** were referred out to nearest health centres.

PRIMARY HEALTH CARE

Growth monitoring and immunizations are key for the growing child to detect malnutrition and prevents diseases. The table below shows under-five indicators

service	2015	2016	2017
Total weighed	13672	10457	8173
underweight	218(1.6%)	158(1.5%)	191(2.3%)
Fully immunized	520	442	452
Polio III	600	506	496
Pentavalent III	405	508	497
Measles	570	501	453
Vitamin A	2454	678	1230

NUTRITION AND REHABILITATION

In 2017, One hundred and sixty **(160)** malnourished children were admitted in NRU. Out of the total admissions, **135** were cured, 20 died, 6 absconded and 6 were re – admitted. NRU death rate is high as compared to the previous year's whereby the cure rate was higher than the death rate. Auditing team has been formed and is implementing measures to reduce deaths due to malnutrition. Table below shows statistics for NRU.

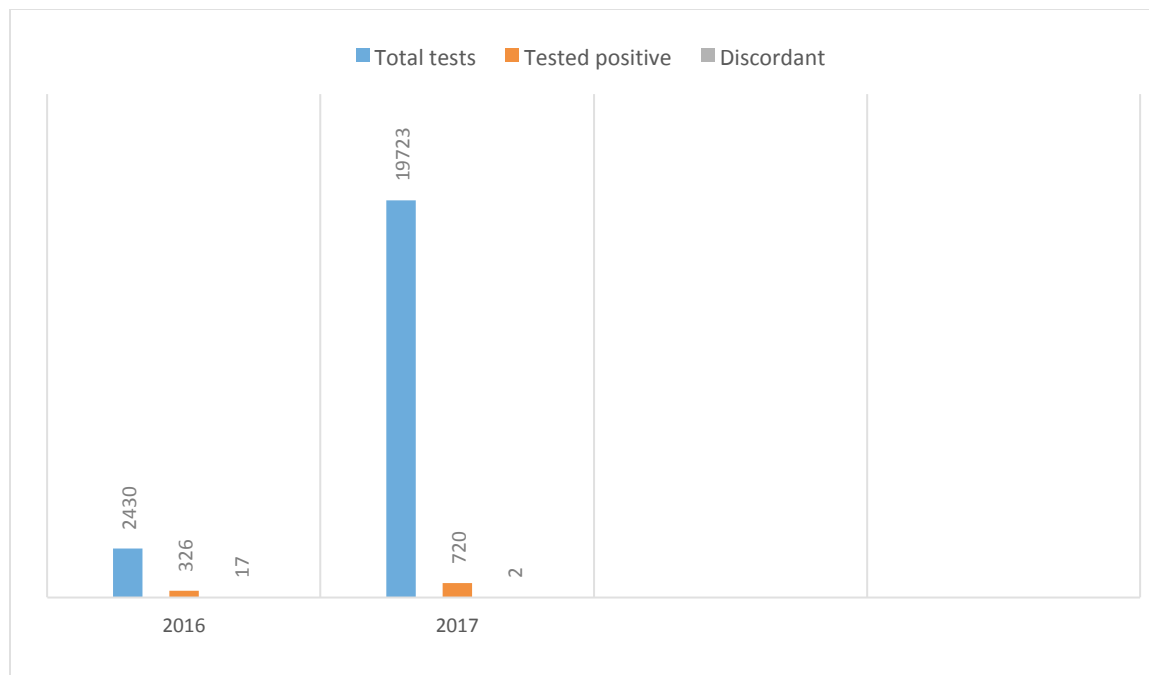
Statistic	2015	2016	2017
New admissions	307	158	156
Re-admissions	20	4	6
Total cured	296	147	135
defaulters	6	11	6
deaths	11(4%)	10(6%)	20(12.5%)

SUPPLEMENTARY FEEDING

Children, lactating and pregnant mothers with moderate malnutrition are given supplementary feeds to prevent severe malnutrition. In 2017, **3077** children, **387** pregnant mothers and **234** lactating mothers benefited from the programme.

HIV TESING AND COUNSELING

HTC services have gone high with support from partners in Hope. The figure below shows trends in HTC services for **2016** and **2017**.



EARLY INFANT DIAGNOSIS

Scaling up of ARs to all pregnant mothers with good adherence prevents HIV transmission to the exposed infant. In 2017, 260 exposed babies were registered according to birth cohort, 67 discharged uninfected, 6 confirmed HIV positive and started on ART, 16 transferred out, 4 died and 36 defaulted. It not easy to follow-up some of these defaulters as many are assumed to be from neighboring country; Mozambique.

FINANCE AND ADMINISTRATION REPORT

The Administration department is responsible for management of finance and Human resources of the hospital. The year 2017 the hospital operated with a budget of MK851, 500,000.00 and a total of 270 employees.

The major highlights for the year are as follows

WASTE MANAGEMENT

The hospital continues maintaining proper waste management through proper waste disposal. The use of the incinerator by the hospital has been of paramount important for the cleanliness as well as for income generating activity. Hospital has become a Center for waste disposal so far the ministry of health through support from Global funds has signed an MOU with St Gabriel's Hospital to incinerate 64, 000 Kilograms of expired drugs.

Other partners working with the hospital on incineration are

- 1) Alliance one tobacco company
- 2) American Embassy
- 3) Embassy of Japan
- 4) Medicines San Frontier
- 5) Limbe Leaf tobacco company
- 6) USAID

There have been enquiries from different partners to use the incinerator as such the management is very optimistic that apart from the hospital fees the hospital will generate other income through incineration activities.

Pic: Verification Team from MoH verifying expired drugs.



Pic: St Gabriel's Hospital Incinerator

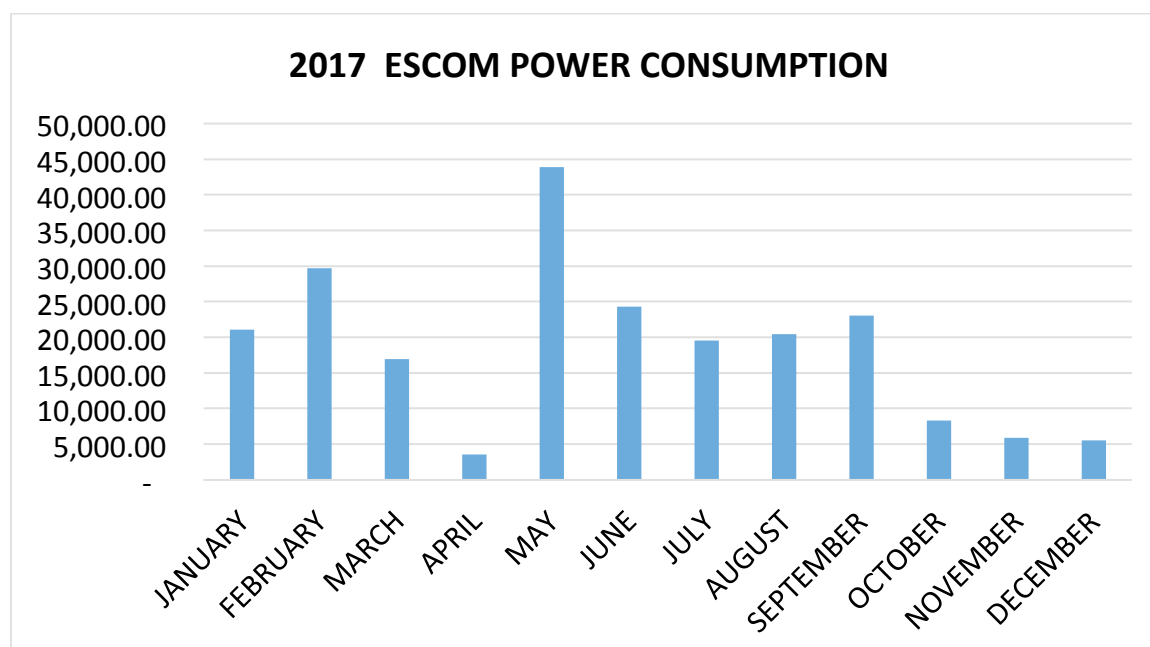


ENERGY

The Hospital depends on three sources of power, Grid power, solar power and generators. For the past years the nation has been experiencing power failure due to lack of capacity by the power generating company to generate sufficient power to meet various demands as such the hospital in 2012 indulged in Solar equipment project to offer an alternative power in the absence of grid power.

So far the following has been experienced since the installation

- 1) Case management has improved as services offered are not interrupted due to power failure
- 2) Electricity bills has been contained more especially in the last quarter regardless a hike in tariff
- 3) The hospital is now self-reliant in terms of power generation.

GRAPH ANNUAL ESCOM CONSUMPTION**FUTURE PLANS**

- 1) The Hospital through support from Foundation St Zithe plans to install new batteries in order to increase capacity so that the hospital should be able to depend on solar for 24hours.
- 2) To remove the industrial meter that the hospital is using and detach staff houses from the hospital meter so that every member of staff should have a prepaid meter and take care of the bills.

SERVICE LEVEL AGREEMENT – GOVERNMENT OF MALAWI

The year 2017 the hospital renewed the service level agreement with the government of Malawi for both Lilongwe and Mchinji districts on the provision of maternal and neonatal health services. As of 31st December, 2017 the hospital owed MK18, 737,418.05 By Lilongwe DHO. The direct beneficiaries to the agreement are the community members who have limited financial resources and the agreement came to fulfil the sustainable development goals in reducing maternal and neonatal death.

CAPACITY BUILDING

The Hospital continues building capacity to members of staff, the trainings has been categorized based on the mode of training

INHOUSE TRAINING/ON THE JOB TRAINING

The hospital members of staff with the support from foundation Ste Zithe in sending specialist doctors both residence and non-residence specialist has equipped staff with vital skills on patient management, in the year 5 non residence surgeons visited the hospital and the 3 residence specialist continues mentoring members of staff in the areas of Surgery, internal medicine and Gynae.

List of Visiting Surgeons

Dr Simon

Dr Alexander Thumbs

Dr Hock

Dr Muller

PROFESSIONAL TRAININGS

Apart from the in house trainings offered to the members of staff the hospital is also providing professional trainings, so far 5 Patients Attendants has been admitted to pursue Diploma Course in Nursing and midwifery and are expected to finish in October 2019, 1 Clinical Officer is upgrading to a Bachelor degree in pediatrics and child health and is finishing in August 2019 and 1 Diplomat nurse has completed upgrading in registered nursing and Midwifery.

PARTNERSHIP

The Hospital continues developing and strengthening partnership with different partners and the year 2017 the hospital was visited by different partners, and below is the overview

PARLIAMENTARIANS COMMITTEE FOR HEALTH

The Members of parliament representing the parliamentarians committee for health visited the hospital to appreciate the prepaid medical scheme introduced at the hospital as a way to replicate the system to other parts of the country, with the plans by the government to introduce fees in public hospital.

St Gabriel prepaid medical scheme was introduced by St Gabriel's hospital to achieve the following

- To reduce the level of sundry debtors
- To help people from around the catchment area of St Gabriel's Hospital to prepare in advance of their health needs.
- To reduce congestion at OPD Cashiers office

Pic: Members of Parliament posing for a group photo with Management and community members who are on medical scheme.





PARTNERS IN HOPE (PIH)

Partners in hope is scaling up HIV/AIDS activity with the hospital aiming of achieving 90-90-90.

A total of 7 HIV/AIDS Diagnosis assistants have been deployed to the hospital and since the partnership the number of clients tested for HIV/AIDS has increased.

Virginia Palmer USA ambassador to Malawi visited the hospital to appreciate the services the hospital is offering to the community in conjunction with partners in hope.

ACTION MEDEOR

Action Medeor has supported the hospital with drugs for pediatrics and medical equipment which has helped the hospital improving management of patients.

During the period the hospital has been visited by Anke Engelke (Action Medeor Ambassador) who mobilized the funds for such a big donation.

Pic: Actress Anke Angelke and Christopher Bossman (Board Chairperson-Action Medeor) welcomed by management members



STAFF MOVEMENT

DEPT	POSITION	TOTAL RECRUITS	TERMINATIONS	REASONS FOR TERMINATION
NURSING	NMT	10	5	Resigned
	Nursing officer	3	1	Resigned
	Patient Attendants	4	0	
	Home craft worker	1	1	Resigned
MEDICAL	Medical Assistant	1	1	Resigned
	Lab Technician	1	0	
	Medical Officer	2	1	Dismissed
	Radiograph	1		
	Clinical officers	5	5	Resigned
	Environ officer	1	1	Resigned
ADMN	Acc Clerk	2	0	
	Security Guards	2	0	
	Ground Labourer	4	3	Dismissed
	Snr Ass Acc		1	Dismissed

FINANCIAL REPORT 2017

The Financial report for the year 2017 has been prepared in accordance to both international accounting standards (IAS) as well as international financial reporting standard (IFRS)

Below are the financial highlights for the year

INCOME

Note 1: GOVERNMENT GRANT

The Government grant has increased by 15% compared to the budget which is mainly attributed by an increase in salaries by the government as well as the additional staff recruited by the hospital.

Note 2: HOSPITAL FEES

Hospital fees has decreased by 16% compared to the budget, and statistically the following are the reasons for the reduction in hospital fees

1. There is a decrease in the number of admissions compared to previous year this is so because of the interventions on the primary care by the government hence most cases are earlier treated than before.
2. Most admitted patients there has been a decrease in the number of days stayed in the hospital because of changes in the treatment guidelines
3. There are patients sharing with Child legacy with a number of patients preferring to access their services because of the fixed tariff.

Note 3: DONATIONS

The Hospital receives donations both in cash and in kind. In the period 2017 both cash donations and donations in kind increased by 48% and 13% respectively compared to the budget and is mainly because most donations were not being anticipated at the time of budgeting.

Note 4: OTHER INCOME

Other income of the hospital comprised of fees from battery charge, rentals received from staff residing in hospital houses, utilities recovered from electricity charged to staff, incineration income and sell of medical books

In the period there is an increase of 32% compared to the budget which was mainly attributed to under budgeting.

EXPENDITURE

Note 5: STAFF COST

There is an increase of 7% on the staff cost which is as a result to the additional staff members recruited in the period.

The other members of staff seconded by CHAM are paid direct from the secretariat

Note 6: OFFICE SUPPLIES

Office supplies comprised of stationery, postage and telephone. In the period we had a favorable variance of 6% which was attributable to a number of printings which were made on recycled papers.

Note 7: MEDICAL EXPENSES/ SURGICAL ACCESSORIES

Medical and Surgical accessories have increased by 13% compared to the budget this is so because of the valuation price used. Note that all drugs are supplied by action Medeor and the valuations were based at the price charged by action Medeor.

Note 8: DEPRECIATION

There is an increase on depreciation charge for the year by 27 million compared to previous year this is as result of the additional assets brought in the period.