

# St.Walburg's Hospital Nyangao

A Faith Based & Council Designated Hospital

ANNUAL REPORT 2019

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St. Walburg's Hospital Nyangao draws its inspiration from the Bible:

"Cure the sick and tell them: The reign of God is at hand"

Luke 10 verse 9

#### Vision

Nyangao Hospital will be a flourishing Catholic Church hospital with a strong emphasis on excellent curative and preventative services for its patients, who will be cared for with compassion by the best people available.

#### Mission

Nyangao Hospital will be fully integrated into Tanzania's health care system and recognized as a partner by Government, have high standards of Customer Care, have a motivated and well trained workforce, and promotes Catholic virtues through the values of the hospital, which are compassion, excellence, integrity, professionalism, and best people.

# Core values

Compassion Excellence Integrity Best People Professionalism

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## 1. Introduction

#### 1.1. History

St. Walburg's Hospital Nyangao is a Faith Based (FBH)/Council Designated Hospital (CDH) situated in Lindi District Council, Lindi Region. The hospital is owned by the Catholic Diocese of Lindi whose Bishop is Right Reverend Bruno P. Ngonyani. The hospital has 220 approved beds capacity and it has been supported by the Missionary Benedictine Sisters of Tutzing and the Tanzanian Government.



In 1947 a small dispensary was opened at Nyangao. In 1959 Sister Tekla Stinnesbeck Doctor ascertained that Nyangao was an ideal location for upgrading the dispensary to a hospital. Therefore she initiated a plan for a hospital with 86 beds. The hospital has been progressively growing and provides health services to the majority of the populations surrounding it and beyond.

Services provided are curative, preventive medicine and outreach. A care and treatment centre (CTC) was established in 2005 and cares for HIV/AIDS patients and PMCTC.

#### 1.2 Catchment Area & Population

St. Walburg's Hospital Nyangao is situated on the hills of the Nyangao Village, north to the border between the Lindi and Mtwara Regions. Lindi region is surrounded by six districts and all combined these have an estimated total of more than 900,000 inhabitants (2012 census). Other satellite facilities under the Diocese are the mission hospitals in Mnero and Kipatimu and Mtua. Despite the fact that these hospitals exist, our hospital coverage is beyond Lindi region. Actually our operations cover the east-southern zone of Tanzania between Kilwa and the border of Mozambique. The hospital even receives patients from neighbour country of Mozambique. This implies that even if the hospital acquires necessary resources at regional level, it still needs more resources to meet the growing health service demand. Nyangao hospital is estimated to serve a population of around two million people.

#### 1.3 Hospital Governance



The hospital has a Governing Board which is chaired by The Vicar General of the Catholic Diocese of Lindi. The hospital Medical Officer in charge is the secretary of the Board.

	Board Members			
	Name	Role	Position	
1	Fr. Angelus Chitanda	Chairman	Vicar General Catholic Diocese of Lindi	
2	Dr. Francis Msagati	Secretary	Hospital Medical Officer in charge	
3	Mr. Theophile Mrope	Member	Diocesan Health Secretary Catholic Diocese of Lindi	
4	Sr. Raphaela Haendler OSB	Member	MSB- Tutzing Sisters Representative	
5.	Sr. Teresa Zemale OSB	Member	MSB- Tutzing Sisters Mother Priores Ndanda	
6	Fr. George Mwiru	Member	Diocesan Treasurer Catholic Diocese of Lindi	
7	Dr. Dismas Masulubu	Government Representative	District Medical Officer Lindi DC	
8	Dr. John Sijaona	Government Representative	Acting Regional Medical Officer- Lindi	
9	Mr. Mathei Makwinya	Local Government Representative	Council Chairman- Ward Executive Representative Lindi Rural Council	
10.	Mr. Charles Laiser	Invitee	Hospital Administrator	
11	Ms. Happy Mrope	Recorder	Hospital Secretary	
12	Mr. Evaristo J.Mnguli	Member	Community representative	
13	Ms. Winfrida Liundi	Invitee	Hospital Matron	
14	Ms. Hawa Mnalipa	Invitee	Hospital Accountant	

#### 2. Summary

In 2019 the hospital continued to improve the quality of health care services delivery with efforts on financial sustainability towards its vision.

During the year 2019 the Government of Tanzania through Public Private Partnership continued to support the improvement of quality of health care delivery with emphasis to compliances on quality aspects. The Government continued to support in various aspects, including human resources, financial resources (health basket fund), capacity building (including mentorship in laboratory quality improvement towards accreditation) and supply of drugs through vertical programs.

In 2019 Lindi District Council transferred the pledged amount of basket funds almost in time. Through the ongoing support of the Missionary Benedictine Sisters (OSB) Nyangao hospital received donations for medicines and medical supplies via Action Medeor. The "Boresha Afya" USAID project continued to support HIV/AIDS and CTC services focusing on capacity building, essential equipment, drugs and laboratory quality improvement towards accreditation. The government's Medical Stores Department continues to support the hospital by providing drugs for vertical program.

Polish government through Polish Medical Mission continued to support improvement of the quality of surgical treatment and mother and child care in Lindi and Mtwara regions. The results of this support was that the hospital established a memorandum of understanding with Muhimbili Orthopedic Institute for a specialist Doctors to come and conduct major operations at St. Walburg's hospital Nyangao. PMM also financed the renovation of labour ward, NICU and Nursing School water infrastructure, dormitories and library.

The hospital continued to receive support from German Senior Expert Service (SES), coordinated by Dr. Zacher. The program has been sending experts to Nyangao to support to support our effort in improving quality of health care services delivery in Nyangao disadvantaged community. In 2019 a Gynecologist, Pediatrician, Sewage systems expert, Dentist, Orthopedic Surgeon, Pediatric Surgeon, Nurse Expert and Health Advisor visited Nyangao.

Through Artemed Stiftung the hospital received visits of experts on areas of IT, Radiography, IPC and hygiene, Internal medicine, Gynaecology, Management and building and construction. In 2019 the hospital established an even stronger cooperation with Artemed Stiftung, when senior officials of Artemed Stiftung visited Nyangao in April and October 2019. These visits enhanced the significant project funded by Artemed towards stabilization of power and electric and IT infrastructures. This project was given a top priority and in October 2019 the agreement for this project was signed between Artemed Stiftung/Rhodes & Schwarts company and the hospital. Artemed made a significant medical equipment donation to the hospital. Ultrasound machines, hospital beds, theatre operation tables, lamps, ECG machine and other medical supplies were donated. With the support of Artemed the hospital sponsored two staff for higher education (degree and masters) in areas of their specialization, and establishment of research activities at the hospital.

During the year the hospital continued to improve the quality of health care service delivery through renovation/availability of the hospital beds, mattresses, staff uniforms, on job capacity building, maternity and labour ward, NICU, dental unit, X-ray unit, laboratory, health insurance office, records & documentation, sewage and water infrastructures maintenance.

Nyangao hospital increased the comprehensive medical service provision almost at every level. The total number of out-patient visits increased as well as the number of in-patients. Also under five, CTC, Dental and Eye clinic registered an increase number of patients asking for medical services. The number of operations increased due to availability of orthopedic surgeons from Mol.

Generally the hospital continued to maintain the quality of health services delivery as per prevailing national health policies and guidelines by the end of the year 2019. In accordance with WHO core functions of setting standards and building institutional capacity, WHO/AFRO, in collaboration with the African Society of Laboratory Medicine (ASLM), U.S Centre for Disease Control and Prevention (CDC) and host countries established the Stepwise Laboratory Quality Improvement Process Towards Accreditation (SLIMPTA) to strengthen the laboratory systems of its member states. SLIMPTA is a framework for improving quality of public health laboratories in developing countries to achieve the requirements of the ISO 15189 standard. Based on this the hospital with laboratory quality improvements. External assessments were done in March (0 star), July (1 star), September (2 stars) and December (4 stars).

The financial and internal controls were strengthened by introducing electronic cash collection. In November an agreement with CRDB bank was signed for the installation of an electronic payment system. The hospital concluded the financial year 2018/2019, without alarming liabilities and debts, all statutory liabilities, for suppliers/vendors were paid promptly. This was an indication of sound financial management improvement as revealed through good audit report (unqualified) by the external auditors.

At the end of the year an abnormal event of unknown diarrhea outbreak occurred within Nyangao ward and its surroundings. This lead to diarrhea and vomiting among patients, especially children below 2 years. The hospital informed the DMO and the RMO. The Ministry of Health send a team consisting of an Epidemiologist, Laboratory Scientist and other experts to find out the root cause. We appreciate the joint efforts/resources by the District, Regional and the Government through Ministry of Health, Community Development, Gender, Elderly and Children. Despite of challenges that were encountered during this outbreak the hospital staff managed to rescue the life of all 101 patients admitted. After further investigation in our laboratory and the National Laboratory the preliminary results showed the causes was associated with Rota Virus.

The hospital congratulated 4 staff who completed their long term training in various colleges in the country. Sr. Dr. Fausta completed her master degree of General Surgery at Bugando Catholic University of Allied Science, Dr Athumani Mambo return from further studies after completing 3 years of master degree in Internal Medicine(cardiology) from Huazhong University of Science and Technology in China and Ms. Hawa Mnalipa completed her degree in Certified Public Accounts awarded by Tanzania National Board of Accounts and Auditors. Dr. Hamis Ngavalanga completed degree in Medicine from Kilimanjaro Christian Medical Centre University and Nurse . Charles A. Kondo completed one year course in Anaesthesia at Catholic University of Health and Allied Science-Bugando

We thank and appreciate the strenuous joint efforts of all staff, with the encouraging input of the Bishop, the Vicar general, Catholic diocese of Lindi, Missionary Benedictine Sisters OSB, Government of Tanzania, Stakeholders, Partners, CSSC and our friends through their support and all others who made the hospital finish the year 2019 efficiently. Finally the management appreciate great efforts and continued commitment towards attaining quality of care (e.g laboratory achievement, life saving effort during outbreak of diarrhea and commitment towards infection prevention & control (IPC)).

#### Major events occurred in 2019

1. Signing of project agreement with Artemed Stiftung Rodes & Schwarz in October 2019 for stabilization of the electrical infrastructure and installation of reliable IT Infrastructure with internet access for St. Walburg's Hospital Nyangao.

2. Signing of Memorandum of Understanding with CRDB Bank - Lindi Branch in November, 2019 for installation of electronic cash collection at the hospital as it was emphasized by the Government as means to improve and control hospital cash collections.

3. Signing of Memorandum of Understanding between Muhimbili Orthopedic Institute Dar es Salaam and St. Walburg's Hospital Nyangao in July 2019 to deliver specialist orthopedic services for population of Lindi and Mtwara so far not existing and to train local doctors orthopedic procedures. This was part of the Polish Medical Mission project of "Improvement of the quality surgical treatment and mother and child care in Lindi and Mtwara, Tanzania. Up to the end of the year a total of 8 orthopedic surgeons from Mol visited the hospital. A total of 135 orthopedic operations were done, among these 74% could have been referred to Muhimbili for special orthopedic interventions. Due to their presence in Nyangao Hospital they managed to support and reduce the cost of vulnerable and poor patients who could not afford to go to Muhimbili in Dar es Salaam. Also they capacitate the junior doctors working in southern part of Tanzania through surgical training attachment which is usually planned for two months period.



Hospital and Artemed Stiftung, signing Agreement no.7 in October 2019.

*fLTR: Mr. Charles Laiser, Administrator, Dr. Veronica CEO Artemed and* Dr. Msagati, medical officer in charge.



Hospital management and senior officials from Artemed after joint meeting held at St. Walburg's Nyangao in April 2019.

Sitting: Fr. Angelus Chitanda, Vicar General and Board Chairman, Sr. Raphaela Haendler , MSB OSB, Dr. Veronica Hofmann.

Standing fLTR: Charles Laiser, Dr. Winfred Zacher, health advisor, Dr.Angelica, Eng Raush, Ms Barbara and Deogratius Millanzi head of hospital technical unit.

4. Signing of Memorandum of Understanding between Sokoine regional referral hospital of Lindi and St. Walburg's Hospital Nyangao in December 2019, part of the public private partnership to enhance collaboration and human resources sharing. Through this MoU, for the first time the hospital started to receive intern's doctors and nurses. Total of 5 doctors and 7 nurses were assigned to Nyangao. The interns are paid their monthly living allowance by the Government, the hospital obligation is to facilitate availability of proper accommodation during their 12 months of practical attachment. This will be a big relief to the hospital in solving the challenges of skilled human resources.

5. Signing of Memorandum of Understanding in September 2019 between Palliative care works (PCW) Tanzania Episcopal Conference (TEC) and St. Walburg's Hospital Nyangao for Introducing palliative care provision in four hospital communities in South East Tanzania. This project has the backing of the Tanzania Ministry of Health. The program will involve Ligula regional hospital in Mtwara, Sokoine regional hospital in Lindi, Nyangao and Ndanda hospitals. It will be funded by UKaid under small charities challenge grant, for capacitating hospitals clinicians and pharmacist on palliative care services provision for 2 years.

6. The hospital organize and conduct a community/ stakeholders meeting in October 2019, for sharing hospital progress/ challenges for common understating on how to mitigate hospital challenges, mainly were customers care, staff commitments and management participation in village meetings for sharing health information and creating awareness to the community. The participants were hospital management, heads of faith based institutions, community / ward leaders, influential leaders, and heads of schools around Nyangao catchment areas.

7. Establishment of research activities in our hospital for improving quality of health care services delivery. In 2019 the research Stimulate to Simulate was initiated by Dr. Marijke Kingma. There is an urgency to improve the quality of obstetric care in our area. The research team introduced voluntary monthly simulation training for every health care worker in labour ward.



On the left: participants of training Stimulate to Simulate are trained by Professor Dr. Jos van Roosmalen

Bottom, left: introduction of electronic cash collection.

Bottom, right: improving Statistics Department





# 3. General overview 2019

Medical Service Provided	2018	2019
Total Number of Outpatient	67,097	68,055
Total Number Of Outpatients in Mobile Clinics	2,600	3,841
Daily Average Of Outpatients	184	186
Total Number of Insured Outpatients	18,148	24,068
RCH – Under-Five	15,595	14233
Vaccinations (all MCH Clinics)	8,639	9,667
Anténatal attenances at Mobile clincs	355	480
RCH- Under five at mobile clinics	N.A	3,361
Total Number Of Beds Accredited	220	220
Total Number Of Inpatients/Admitted	10,590	10,337
Average Length Of Stay In Days	4	3
Admissions in Private Ward	401	475
Bed Occupancy Rate	58.4%	45.1%
Number Of Deaths	442	370
Mortality Rate	4.2%	3.6%
Major Theatre Operations	1,536	1,705
Minor Theatre Procedures	3,637	6,050
Deliveries	2,514	2,405
TB Diagnosis	2,189	2,233
Eye Clinic	604	804
Number of patients enrolled in HIV care( TX New)	251	225
Total number of clients enrolled CTC	1,765	1,990
Number of HIV tested HIV tested positive	136	281
Laboratory Examinations	75,303	70,252
Blood Transfusions	4,238	4,406
X-Rays taken	4,614	6,661
Ultrasound taken	1,803	3,229
Total attendance dental unit	2,098	2,233
Total Hospital Employees	206	216
Finances (in thousands)	2018	2019
Total Hospital Expenditure	TZS 2,041,383	TZS 2,060,669
Total Income from Government	TZS 227,248	TZS 219,823
Total Income from User fees	TZS 959,324	TZS 923,415
Total Income from Health Insurances	TZS 683,215	TZS 656,356
Total Income from Drugs	TZS 306,706	TZS 304,671
Total Income from Donors	TZS 429,831	TZS 530,050
Total Other Income	TZS 20,464	TZS 30,255

# 4. Human Resources

## **Employment status**

The hospital has total of 240 staff which falls under the following categories: Employed and paid salary by the hospital are 95 Employed by the hospital and salary paid by the Government are 85 Employed by the Government and attached to the hospital are 37 Volunteers were 23

## Long-term Training:

During the year total of 5 were in further studies in various institutions as follows:

- Dr. Masanja Kasoga taking 3years Master's degree in Gynecology at Muhimbili University of Health and Allied Science expected to complete in 2020.Sponsored by Artemed Stiftung.
- Nurse Sospeter Nyagabona taking 4 years degree in Nursing at Bugema University in Uganda Sponsored by Artemed Stiftung expected to complete on 2022
- Clinical Officer Robert Michael taking 5 years degree in Medicine in Muhimbili University of Health and Allied Science expected to complete on 2020
- Nurse Michael John Simon taking 3 years Diploma in Nursing at Sr.Dr.Teckla Nursing School Nyangao under self-sponsorship and expected to complete on 2022
- Nurse Domina Mugyabuso taking 4years degree in Nursing at St. Augustine University under self-sponsorship.

#### Short-term and on job training:

- Dr.Andreas M.Gai attended and completed 6 month course on Epidemiology and Outbreak Management at Mtwara sponsored by Ministry of Health, Community Development, Gender, Elderly and Children-Tanzania.
- Nurse Charles A.Kondo attended and completed1 year course in Anaesthesia at Catholic University of Health and Allied Science-Bugando sponsored by the Hospital
- The hospital conducted on job training between March-May 2019 on Customer Care, Time Management, Stewardship, Integrity and Accountability, Vision, Mision and Hospital plan (CHOP) to Hospital Management, Heads of Units and Quality Working improvement Team facilitated by Diocesan Health Secretary and St. Benedict Ndanda Hospital Quality Focal Person.
- Hospital Accountant attended 3 days training on Comprehensive Hospital Operational Plan (CHOP) at Morogoro which was facilitated by CSSC.
- The Hospital organized 1 day training in Fire Emergency Response to 58 hospital staffs facilitated by Alexander Fire point Limited and Lindi Fire Rescue Force.
- The hospital Management in collaboration with Lindi Regional Ant-corruption Bureau conducted 1 day training on roles, effects and consequences of corruption to Health care workers facilitated by head of Ant-Corruption Bureau (PCCB) Lindi Region
- The Hospital Management in collaboration with head of Regional Traffic Office's Lindi Police organized 2 weeks training on Road Safety and standard driving procedures
- Ministry of Health, Community Development, Gender, Elderly and Children conducted various Laboratory Quality Trainings whereby Laboratory Staff attended the following courses; Total Quality Management System, Root course analysis, Laboratory internal Audit, Method Verification and Waste Management.

# Staff Recruitment:

During the year, the hospital employed/replaced 13 employees in the following cadres;

- 1 Medical Doctor(Replacement)
- 1 Social Welfare Officer(Project)
- 1 Bio-Medical Technologist
- 1 Hospital Administrator(Replacement)
- 6 Nurses(3 were replacement)
- 3 Laboratory staffs(2 were replacement)

## Staff Turnover:

During the year, the following employees left the hospital

- 1 Accountant (Resignation)
- 1 Cleaner (Retirement)
- 3 Nurses (1 retirement,1 resignation,1 government transfer)

## 5. Curative Services

In 2019 the hospital received 68,055 patients using out-patient department services. compared to 67,097 in 2018. This time Malaria was not number one among top ten disease due to efforts done for regular fumigation, environmental cleanness and advocating use of mosquito nets. The number one was hypertension followed by fractures dislocations. The number of OPD under five visits showed a decrease from 15595 to 14233 (difference of 1362 patients) compared to 2018. This could be due to Government improving their primary health care facilities and the impact of health education during

the outreach visits. However a lot of patients came from outside the actual catchment area of Lindi rural district.

The Reproductive and Child Health (RCH) department deals with antenatal care and prevention of mother to child transmission of HIV for under five years old. It has one daily static clinic and several mobile clinics for the nearby three villages, which are Chiwerere, Litingi and Mahiwa. The main objective of the outreach is to support the mothers in preventive medicine, vaccination, health education and advising on family planning. The team consisting of a senior registered nurse working in RCH department, a health officer, a social welfare officer, a clinical officer, two enrolled nurses, three medical attendants and one driver are responsible for ensuring the outreach is well conducted. The plan is one visit per week.

Top 10 diagnoses in 2019			
No	Disease	Cases	
1	Hypertension	3556	
2	Fracture/dislocation	2866	
3	Malaria	2654	
4	Upper respiratory infections	2218	
5	Urinary tract Infections (UTI)	1791	
6	Anaemia	1687	
7	Gynaecological disease other	1666	
8	Pneumonia	1278	
9	Diabetes	838	
10	Pregnancy complications	697	

Antenatal Clinic		
First attendance	5412	
Re-attendance	5158	
Total	10570	

Under five clinic	
First attendance	7658
Re-attendance	3292
Total	10950

Mobile clinics	
Under five clinic	3361
Antenatal clinic	480
Total	3841

For Preventing Mother to Child Transmission (PMTCT) services the number of first attendance in 2019 was 5412 patients, whom were counselled and tested. Among these patients 459 were HIV-negative and 12 were HIV-positive.

RCH registered 14233 pregnant women which is a decrease of 1362 patients compared to 2018. RCH registered 7658 new under-five patients, out of them the re-visits where 3292 RCH counselled 480 women on PMTCT.

CTC had 4137 visits, 225-patienst more compared to 2018 which is an increase of 7.2%. Out of these 1990 visiting patients 943 were receiving ARV. Number of Provider Initiated Testing & Counselling (PITC) patients was 6888. The tuberculosis unit registered 394 new cases and 1839 re-visits.

Dental clinic registered 2233 patient, which is an increase of 135 patients compared to 2018. The eye clinic had a total of 804 visits, which is an increase of 200 patients compare to 2018. During the year the hospital received a dental X-ray with a laptop donated from Germany through Dr. Zacher.

During the year under review total of 25,123 poor patients were exempted from payment by the hospital under social welfare department, because they could not afford to pay for their treatment. Most were pregnant women, children under five years of age, old disabled people and those with mental health problems. The total amount of exemptions for the year 2019 was **679 million shilling** which was costing the hospital equal to **56 million shilling per month**.

Dental Unit 2019	
Total patients attended	2233
Patients with dental caries	2140
Patients with periodontal disease	200
Patients with dental abscess	113
Patients with imparted tooth	58
Patients with infected socket	21
Patients with trauma injuries	117
Patients with tumours	2
Teeth extraction	1513
Tooth filling	188
Incision & Drainage	49
Interdental fixation	17



# 6. Medical Departments

The Internal Medicine departments counted a total admissions of 10337 patients in 2019, which means a decrease of 253 patients compared to 2018. This includes the admissions at the private wards of 475 patients.

The average length of stay for in-patients admissions was three days. The bed occupancy rate reached was 45%, which is a decrease compared to the rate of 58% of 2018. In the year 2019 the Hospital had to register 370 deaths (3.6%), compared to 442 (4.2%) in 2018 of total patients.

#### 6.1 Internal Medicine Department

Through collaboration from Artemed Stiftung and SES in Germany the senior experienced nurses came to Nyangao hospital for experience sharing and capacitate our Nurses on quality and hygiene aspects. In November 2019 Dr Athumani Mambo return from further studies after completing 3 years of master degree in Internal Medicine(cardiology) from Huazhong University of Science and Technology in China.



#### 6.2 Pediatric Department.

The Paediatric department is responsible for the diagnostic process and treatment of the under 15 years old in-patients and the under 5 years for both in patients and outpatients at RCH.

The total number of admissions on the paediatric ward on medical side was 1341 admissions. On the surgical side 308 Admissions were registered.

	Pediatric Ward 2019			
	Top-5 diagnoses medical	Cases		
1	Malaria	732		
2	Anemia	346		
3	Gastrointestinal disease	208		
4	Pneumonia	161		
5	Upper respiratory tract infection	68		
	Top- 3 diagnoses surgical	Cases		
1	Fracture	40		
2	Burn	12		
4	Osteomyelitis	2		

# <u>6.3 Reproductive Department.</u> 6.3.1 Obstetrics & Gynaecology Department

In 2019 there was a renovation of labour ward among other things which was done on renovation was maintaining a high standard of privacy for pregnancy woman during delivery. Also through on job training and capacity building the number of birth asphyxia and still birth in labour ward reduced by 54%. The challenges still facing in this department are delay referrals from satellites facilities and delay in health seeking behaviour hence some of these patients come in very late stage which sometimes make it very difficult to manage those patients .and. These women are also admitted at ward 4.

# 6.3.2 Neonatal Intensive Care Unit

The Neonatal Intensive Care Unit (NICU) is an annex ward of the Obstetrics & Gynaecology Department. At this ward sick, small or premature new born babies are admitted. Due to low resources and challenges in dealing with the vulnerable babies the mortality rate in 2019 was very

high. To change this we created a new protocol for treatment of these babies. This way we try to practice evidence based care as well as possible in our setting. Also we will try to include mothers more in the medical parts of care. This gives a better and more continuous observation of the babies, both in the hospital as well as after discharge. Step by step we hope to lower the morbidity and mortality rates.

NICU	2018	2019
Babies admitted	548	478
Number of deaths	74	52
Mortality rate	14%	11%
Bed occupancy	142%	108%



#### 6.3.3 Maternity & Labour ward

The maternity & labour ward recorded 2405 deliveries in the year 2019, compared to 2514 the year 2018. Of these deliveries 1643 babies were delivered with a normal birth. The amount of babies born through an abnormal birth was 762, compared to 790 abnormal birth of 2018. The number of caesarean sections done in 2019 was 606 compared to 613 in 2018.

In October the unit conducted a three days seminar on nursing safer motherhood of which 20 participants attended, 7 were from Nyangao hospital and the rest were from Lindi and Mtwara health facilities.

In December 2019 the unit facilitated 3 days training on maternal child health service participants were 20 midwives nurses; 8 from Nyangao and other 12 nurses come from dispensaries and health centers around Lindi district During the training the topic covered were antenatal care, antepartum, hemorrhage, multiple pregnancy, pre-eclampsia and eclampsia etc. All the two training were supported by PMM project.



Left: baby and mother on the new NICU Right: first baby born on the renovated Labour ward

#### 6.3.4 Research Stimulate to Simulate

Complications during pregnancy and delivery are often observed in a sub-Saharan countries, such as Tanzania. There is an urgency to improve the quality of obstetric care in our area. In 2019 we introduced voluntary monthly simulation training for every health care worker in labour ward. It was already known simulation training improves quality of maternal and neonatal care, but long term effects in low resource setting are more unclear. In 2019-2020 we saw that it is possible to implement regular low cost training in a low resource setting and the first results also show an improvement of knowledge and skills.

Simulation training focusses mostly on individual learning, but to really improve quality of care we need to improve the whole system. Human makes mistakes, we are no angels. Worldwide most harm in health care is due to human factors. Usually harm done to a patient cannot be blamed on one person, but is an



effect of a failing system. Multiple consecutively small human mistakes cause one big error. In Nyangao we are facing a lot of challenges due to low resources, this causes even more human error. As we cannot create a lot of money all at once we need to look at things from another perspective. This is what the second half of the study will be about.

In 2020 we will introduce crew resource management (CRM) training during the simulation training. Is short CRM means: looking at what you do have (instead of what you do not have) and how you can use this more effectively. The goal of CRM is to coordinate, utilize and apply all available resources (including people) as optimal as possible to improve safety and outcomes. Crew resource management is never described as an intervention in a low resource setting. This study will see if crew resource management also has benefits in a low resource setting and if it is possible to implement regular training in the system.

# 6.4 Surgical & Anaesthesia

# 6.4.1. Surgical Department

In 2019 the total number of operated patients was 1,789 major operations. The total number of minor theatre procedures reached 6,050. The difference between number of operated patients and number of major operations results from some multiple procedures on one patient.

Compared to 2018 the total number of operated patients Increased by 169 patients mostly due to completion of renovation of the major theatre and availability of Orthopaedic Surgeons from Muhimbili Orthopaedic Institute (MOI).

The hospital was able to organise workshops by inviting participants from Lindi and Mtwara Regions, facilitated by experienced surgeons from MOI. Two months practice in surgery department for doctors from neighbouring hospitals of Lindi and Mtwara region and able to organise a two day Workshop on "Surgical and Orthopaedic topics", which

Top most common operations done in 2019			
s/n	Type of operation	Numbers	
1	Caesarean section	585	
2	Orthopaedic of various types	339	
3	Excision of various superficial tumours & biopsy	332	
4	Laparotomies	166	
5	Hernias of various types	160	
6	Abdnominal hysterectomy	105	
7	Salpingectomy, cystectomy, adenectomy	99	
8	VVF – Repairs	3	

took place in December 2019. The participating doctors came from Hospitals at Nyangao, Mangaka, Newala, Namikupa, Nanyamba, Tandahimba, Nachingwea Kipatimu, Liwale, Kitangali, Mbonde, Mnero, Ruangwa, Kilwa, Kitomanga, Nyangamala and Mtama.

In 2019, the hospital established a cooperation with Muhimbili Orthopaedic Institute whereby Surgeons from Mol came for a two weeks period to treat patients at Nyangao hospital, this was a big relief to patients who mostly cannot afford to go to Dar es Salaam for treatment of bone surgeries.

Nyangao Hospital is the hospital in Lindi Region offering most of specialized operations from general surgery, orthopaedics, urology club foot, complicated abdominal trauma, paediatric surgeries and is practically acting as a referral hospital for the above mentioned specializations. In May 2019, Sr. Dr Fausta Liundi return from further studies after completing 3 years of master degree in general surgery from Bugando Catholic University of Medical Allied Science.





One of the complicated operation performed and it was successful: the patients who fall from the coconut tree and on reaching the ground a big wooden stick entered the stomach through back side

The number of traumatic cases treated in Nyangao Hospital is still increasing. Around 50% of total admissions in surgical department are traumatic cases. Most of the patients are victims of traffic accidents, caused especially by motorcycles. Around 60% of them have fractures, mainly lower extremities, many of them complicated open fractures. Due to reliability of specialist and equipment a lot of patients preferred to be referred to Nyangao Hospital.

## 6.4.2 Anaesthesia department

The anaesthesia department faced staff shortage in 2019.

The department for continue support provided by Dr. Daniela Kietzmann, a German consulting anaesthetist working in Sweden. She is coming every year for capacitating anaesthetic staff and support the department with important anaesthetic equipment.



Type of anesthesia	Major Theatre	OPD Theatre	Delivery Room	Total
Spinal	1049	5	-	1054
Short G.A	75	340	198	613
Gen. with intubation	540	-	-	540
Gen. with LMA	20	-	-	20
Local	15	35	99	149
Total	1999	380	297	2376

# 7. Supporting Departments

# 7.1 Laboratory

Laboratory team consists of eight qualified staff members comprising of Laboratory Technologists Technicians. They are supported by other laboratory staffs. The laboratory is equipped with basic laboratory equipment and maintains a simple and accurate inventory management system. The laboratory is enrolled to the SLIPTA – Stepwise Laboratory Improvement Process towards Accreditation. Through this process the lab was assessed 4 times and attained 4 stars in December 2019. The Laboratory performed 70252 investigations and tests.

Laboratory - Investigations	2018	2019
Haematology	23045	22374
Parasitology	12768	11402
Parasitology MRDT	19260	21853
Serology	4615	4952
Chemistry - Blood & Serology	5898	3397
Blood transfusion	4615	4810
Bacteriology	1902	966
Chemistry - others	521	3397
Microbiology	1902	966
Total	74526	70252



Left: new XL 180 chemistry analyzer in Laboratory. Right: Laboratory team receiving training on fire outbreak emergency management

# 7.2 Pharmacy

Hospital patients are served through four Pharmacy units: Main Pharmacy, Emergency Pharmacy, CTC Pharmacy and Raphael Pharmacy. This units are effectively and managed by a Pharmaceutical Technician. He is supported by 8 pharmacy attendants in dispense of medicines and medical supplies to patients on a daily basis. The emergency pharmacy is open for 24 hours, seven days a week.

During the year 2019 the hospital had 80% drugs and medical supplies available. There has been no significant out of stock in the hospital for the tracer and essential drugs.

In 2019 the hospital in collaboration with Action Medeor through the support of friends in Germany facilitated one week training for improvement of pharmaceutical services 30 participants from all the health facilities under the Catholic Diocese of Lindi participated.

Pharmacy - Top ten drugs 2019		
1	Amoxicillin capsules 250mg	
2	Paracetamol tablets 500mg	
3	Nifedipine 20mg/Amlodipine 10mg	
4	Diclofenac 50mg/Aceclofenac 100mg	
5	Cotrimoxazole 480mg	
6	Bendroflumethiazide 5mg	
7	Captopril 25mg/Losartan 50mg	
8	Atenolol 50mg/Pregbalin 75mg	
9	Doxycycline 100mg/Metronidazole 200mg	
10	Ampicillin injection 500mg/Ceftriaxone Inj 1 g	



Left: stock checking by pharmacist Right: store staff member receiving training

# 7.3 Technical Unit

The Technical unit has the following team consists of 2 support staff, 1 computer technician and 1 plumbing assistant. The hospital also employed 1 Biomedical technologist. She is having a diploma in electrical and biomedical engineering from a reputable technical college in the country .The main role of the unit is to ensure planned preventive maintenance at the hospital, nursing school and staff houses. Infrastructures are regularly repaired and maintained. During the year the department continued to experience regular water pipes and water tank leakages due to its decay. The plan is to have major rehabilitation of the water infrastructures and back up water pump.

Major activities/ tasks performed were:

- Major service of one of oldest generator (the hospital has 2 generators)
- Rehabilitation of water systems and sewage infrastructures.
- > Construction of hospital car parking area for avoiding wear and tear and decay.
- > Major repair of hospital equipment/items which are stretches, beds, wheelchair etc.
- > Major renovation of three staff houses and hospital buildings
- > Installation of OP lamp and OP Table in Theater. Donated by Artemed Stiftung.
- > Renovation of Labour ward and NICU funded by Polish Medical Mission.





# 7.3.1 Buildings

By the end of year 2019 we thanked the Polish Government through Polish Medical Mission and Artemed Stiftung for their continued supporting the hospital. With the help of this organisations the existing operation theatre was renovated and refurbished. Furthermore through the support of Polish Medical Mission the hospital was able to renovate the delivery ward and combine it with – a bigger and more equipped - NICU-department. For the Nursing School water infrastructures and the library were repaired. The technical department also renovated some of the staff houses and improvise innovative idea to turn the old ward building into a meeting/conference hall.





Polish Ambassador visit at opening of renovated labour ward and NICU

## 7.3.2 Sewage

The sewage system was monitored. Two leaching area were cleared and maintained. From May 2019 we start to empty first sewage pond. Pond 1 all sludge removed and pond cleaned. On July 25 we finish to clean all sludge in pond 1 and 26 July 2019 start refill the Pond. We thank Dr Muller - Expert of Sewage system from SES Germany - for his expertise on sewage management during all the time of remove the sludge and refill the pond. And for next year we plan to clean pond 2, but to complete emptying of pond 2 we need a vacuum pump.





## 7.3.3 Electricity

We have a backup of two old generators. One of the oldest generator was required major maintenance and maintenance. The hospital continued to experience unstable and reliable power/ electricity provision by TANESCO.. We hope and expect in 2020 the project for stabilization electricity at the hospital to be supported by our reputable partners Artemed Stiftung and Rhode & Schwartz company of Germany will solve these challenges. MoU already signed MoU in October 2019 for this project. The hospital appreciates Artemed Stiftung for supporting this big Investment project.

## 7.3.4 Hospital Management Information system

The hospital is striving to acquire the health management information systems which will enhance the proper resource utilization with reduced Turnaround Time for the patients.

During the year the hospital continue to improve the records and documentation unit by establishing a separate and conducive area for keeping all hospital patient records. Once the Artemed Stiftung project for installation of reliable IT Infrastructure with internet access for St. Walburg's hospital Nyangao is accomplished, then the health information systems will be improved significantly.

#### 7.4 X-ray department

The radiology department is organized by two radiographers, a total of 6,635 X-Ray investigations were done in 2019. The unit is currently using the digital X-ray processing system. The Tanzania

Atomic Energy made an assessment of the unit and recommends to replace the old lead sheets which were completely worn out. This was done accordingly, in addition Artemed donated insulate materials for staff in the unit for protecting them on radiation and capacitate the unit for improving the X- Ray and Ultrasound Imaging

#### 7.5 Histopathology

The cooperation with oncology centre in Bydgoszcz Poland - which is doing histopathology examinations for Nyangao Hospital – has been continued during 2019. The costs of examination were covered by the Polish Medical mission project. At the end of the year a cooperation between DHL and the hospital has been established, which allows to significantly decrease time of transport of the biopsy abroad, more than 332 biopsy were send for diagnosis and it took a maximum interval of two week to receive the results.

#### 7.6 Pastoral and Social Welfare Office

The unit was strengthened by employing a social welfare officer. The social worker plays an important role in **Total** 

A-hay investigations				
	2018	2019		
Chest	2.568	2857		
Pelvis	229	386		
Forearm	129	311		
Shoulder	71	208		
Elbow	106	231		
Wrist	148	186		
Skull	119	156		
Ankle	166	209		
Knee	121	325		
Femur	162	291		
Hand	35	85		
Foot	31	107		
Lower leg	374	480		
Cervical spine	24	134		
L/spine	107	391		
Plain Abdomen	234	232		
Contrast Studies	30	46		
Total	4703	6635		

X-Ray Investigations

identifying the poor patients who deserve to get free medical services. She also attends both patients and staff complains Thanks to Polish Medical Mission for supporting the hospital to recruit the social worker through project.

The social worker participate in mobile outreach services conducted by the hospital in three villages for providing vaccination, health education and other diagnostic services for pregnant women and children once per week. The patients and staff continued to get spiritual services whenever need arises.

In February 25<sup>th</sup> annually the hospital commemorate and honours memorial of Saint Walburga, the patroness of the hospital. The Bishop of the Catholic Diocese of Lindi, who is the owner of the hospital attended this ceremony. He also visits the patients and give gifts to the hospitalise children.



Bishop Right Reverend Bruno P. Ngonyani visiting the patients in the hospital during Saint Walburga's day

Pastoral/Social worker and complain figures 2019				
Complains received				
From	From	From	Total	Solved
staff	outpatients	inpatients	complains	complains
4	13	9	26	20

Most of the complaints are related to customer care related, and were addressed and feedback was given.

Outreach/Mobile Clinic					
Village	Under 5 years	Antenatal mothers	Vaccinations		
Litingi	627	122	307		
Mahiwa	1090	201	454		
Chiwerere	1400	176	471		
Total	3117	499	1232		

# 8. Sr. Thekla's Nursing School.

Class	Males	Females	Total
1st year	17	18	35
2nd year	1	3	4
3rd Year Ordinary Diploma	1	2	3
3rd Year Upgraded Diploma	8	3	11
TOTAL	27	26	53

In 2019 the school had 53 students as follows:

#### Staff:

Academic staff – Full time Tutors 8, Part Time Tutors 9, Supporting Staff 8.

**Theoretical session**: Facilitated in class as scheduled. Clinical rotation: Students provided nursing care to patients as St. Walburg's Nyangao Hospital and gained practical experience in the care of patients.

**Field work**: As the 2nd years were only 3, the field work practice was done at one village – Mtua in Lindi District Council. This was done from 01.06.2019 to 22.06.2019. Supervision of students during field work was done by teachers and In-charge of the Facility.

**Semester examinations:** These were conducted as scheduled according to NACTE ALMANAC following regulation of Supervisory Authorities. The examination results were very good.

In August 2019, TNMC granted us permission to offer Diploma Training. NACTE granted us permission to offer Upgrading Diploma Training.

In recruiting students in September 2019, we enrolled 34 first year students and 11 students for Upgrading Course. This achievement was great and we hope that we would continue to recruit more students in future.

**Renovation**: Through the aid of Polish Medical Mission some areas of the school infrastructure were renovated and repaired. We express our sincere gratitude to PMM for this help.





# 9. List of Abbreviations

Hospital workers celebrating during Saint Walburga's memorial on 25<sup>th</sup> February, 2019



We thank the major donors and partners for their continuing support of St. Walburg's Hospital Nyangao



and Sr. Dr. Thekla Nursing School Mission Benedictine Fathers Ndanda Friends of Nyangao, Germany Friends of Nyangao, the Netherlands

## Acknowledgement

We thank the Almighty God who has guided us each day of 2019 and who gave us the opportunity and privilege to serve Him in so many needy people. We implore him to continue to be with us and to bless the countless number of people, organizations, friends and individuals who helped us in different ways throughout the year. May the Lord bless them all to continue with their courageous and commitment towards mutual cooperation and support.

On behalf of the entire hospital staff, we the members of the Hospital Management Team (HMT) would like to thank all the benefactors of St. Walburg's Hospital Nyangao in Tanzania and Abroad. Their help is of great importance to our hospital in order to be able to continue providing quality health services to all our patients and clients in this part of rural areas where most of the community are vulnerable.

Our thanks first goes to the Bishop of the Diocese of Lindi, Rt. Rev. Bruno Ngonyani, Vicar General, Rev. Fr. Angelus Chitanda, to treasurer Fr. Willibald Mbinga and Fr. George Mwiru, to Diocesan Health Secretary Mr. Theophile Mrope and the entire staff of the Diocese. Special thanks go to all members of the Governing Board of St. Walburg's hospital Nyangao.

The Government of United Republic of Tanzania through the Ministry of Health Social Welfare Gender, Elderly and Children, the Regional and District Medical Officers of Lindi, Tanzania Episcopal Conference, the Christian Social Services Commission (CSSC), Dar es Salaam.

Missionary Benedictine Sisters of Tutzing through Sr. Raphaela Haendler OSB, the Procure of the Missionary Benedictine Sister of Tutzing, Germany as well as Dr. Winfried Zacher for their tireless support, counselling and guidance.

Our sincere appreciation to our potential partners Artemed Stiftung for their significant support and commitment to our hospital. Polish Medical Mission, for the improvements of infrastructures and quality of health care. SES in Germany for sending senior experts to capacitate the hospital on various areas.

Muhimbili Orthopedic Institute for support in improving surgical skills and orthopedic surgeries in Lindi and Mtwara regions.

USAID Boresha afya for their support in HIV interventions and laboratory quality improvement towards accreditation.

Our stakeholders, National Health Insurance, CRDB Bank Lindi Branch, NMB Bank Lindi and Ndanda Branch.

Last but not least we thank the entire hospital staff for their dedicated work and in particular our patients and community at large for their trust and good reputation towards the hospital.

Francis N. Msagati MO in charge Charles D. Laiser Administrator



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