

St. Walburg's Hospital Nyangao

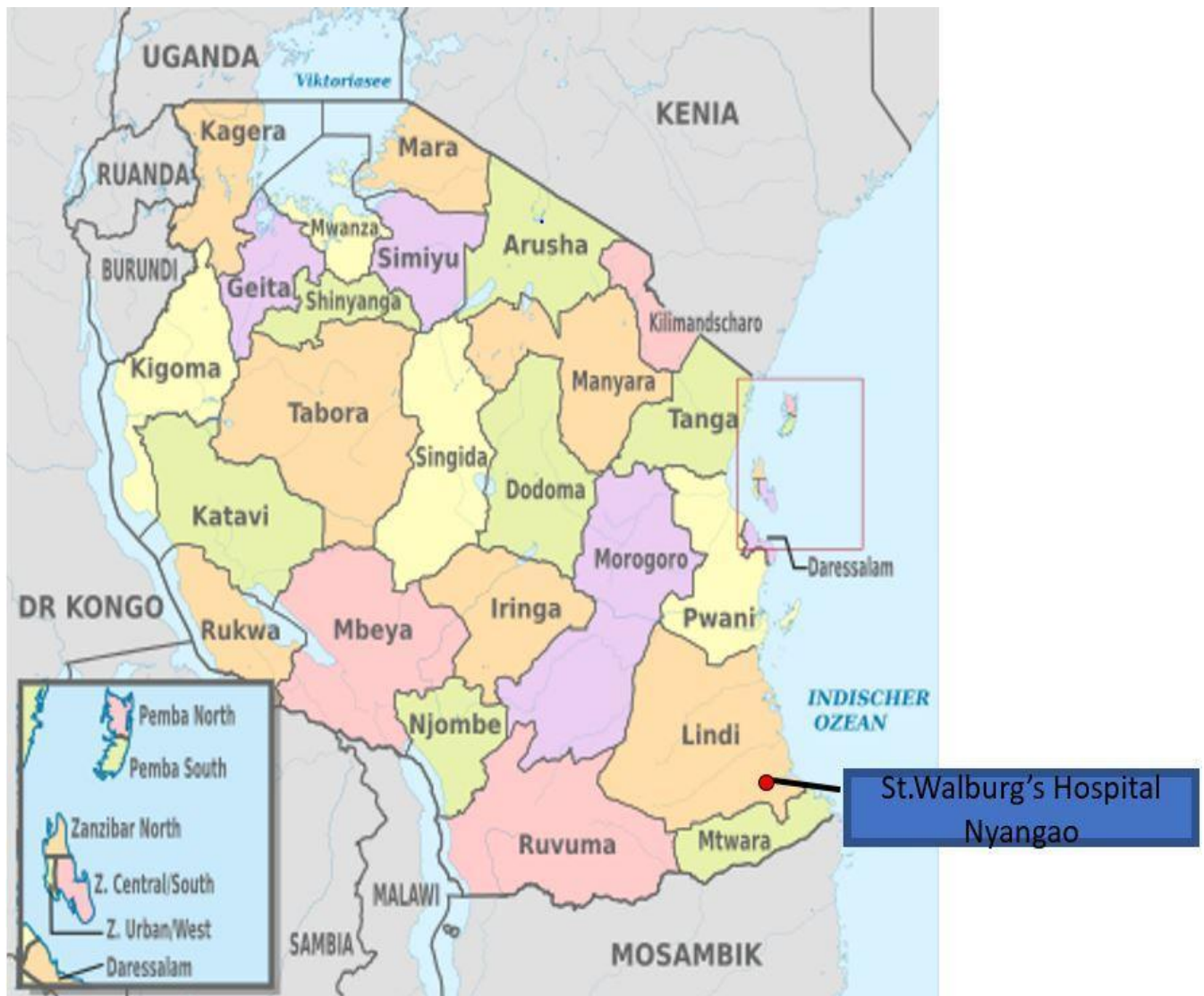


Annual Report 2021



*"Cure the sick and tell them:
The reign of God is at hand"*
Luke 10:9

Map 1: Showing Location of St. Walburg's Hospital Nyangao in Tanzania



Source: Wikipedia

All rights are reserved. No part of this publication may be used or reproduced in any manner whatsoever without permission of the publishers.

© 2021 St. Walburg's Hospital Nyangao

Acknowledgements

The successful completion of the Annual report 2021 was enabled by the collaborative efforts of various individuals whose contribution is highly appreciated.

Initially, the hospital management wishes to extend its sincere gratitude to the staff of St. Walburg's hospital Nyangao for their commitment to the facility making Nyangao hospital a better health care provider in the Southern Tanzania. To all stakeholders, your efforts and support will be paid with results.

We would like to thank the Missionary Benedictine Sisters for their continuing support in many areas, especially for facilitating free care for mothers and children, through which many lives have been served. We gratefully acknowledge their guidance and support.

We also recognize the remarkable contribution of Artemed Foundation in improving our hospital's ICT and electrical infrastructure, exchange of expertise and sponsorship for training and material support.

Thank you, Polish Medical Mission, for your continuous support and fundraising, exchange of expertise, help in raising awareness on gender-based violence, provision of medical equipment, and for renovating the RCH and Pregnant mothers waiting area.

All this would not have been possible, if not for the good governance by the Bishop of the Catholic diocese of Lindi, who cordially works with the government of Tanzania and the local government, through the district executive Director of Mtama District Council and his team, to ensure the people of Nyangao, Lindi and beyond receive the best services.

Lastly, thanks to all benefactors, friends of the hospital, and to the people of Nyangao for all your support. May God keep you safe.



Dr. Masanja Kasoga, MD, MMED

Medical Officer In-charge



Mr. Charles D. Laiser

Hospital Administrator

Contents

Acknowledgements	3
1. Introduction	7
1.1 Vision, Mission and Core Values	7
1.2 Catchment area & population.....	7
1.3 Hospital Governance	8
2. Summary.....	10
3. General Statistics overview 2021	12
4. Finance Department.....	13
5. Human Resources.....	15
6. Curative Services.....	17
6.1. Reproductive and Child Health Services	18
6.2. Covid 19 Pandemic	18
6.4. Dental Unit	19
7. Medical Departments	20
7.1. Internal Medicine Department.....	20
7.2. Pediatric Department.....	20
7.2.1. Nutrition	21
7.3. Obstetrics & Gynecology Department.....	22
7.3.1. Neonatal Intensive Care Unit.....	22
7.3.2 Labour ward.....	23
7.4 Surgical Department.....	24
7.4.1 Anaesthesia unit	25
8. Supporting Departments.....	26
8.1. Laboratory	26
8.2. Pharmacy	27

8.3. Technical Department.....	28
8.4. Buildings.....	30
8.4.1. Mortuary.....	30
8.4.2. RCH and Pregnant Women Waiting buildings.....	30
8.5. Electricity.....	31
8.6. Hospital Management Information system (HMIS).....	32
8.7. Radiology Unit	32
8.8. Pastoral and Social Welfare	33
8.9. Hospital Garden and Environmental up keep	34
9. Sr. Thekla's Nursing School	35
10. Remarkable events during the Year 2021	37

List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral drugs
CareMD	Patient Care Medical Digitalization
CTC	Care & Treatment Centre
DC	District Commissioner/District Council
DED	District Executive Director
DMO	District Medical Officer
eHMIS	Electronic Health Management Information System
ENT	Ear, Nose and Throat
FBH	Faith Based Hospital
HIV	Human Immunodeficiency Virus
MBS	Missionary Benedictine Sisters
MCH	Mother and Child Health
MOI	Muhimbili Orthopedic Institute
NACTE	National Council of Technical Education
NHIF	National Health Insurance Fund
NSSF	National Social Security Fund
OSB	The Order of St. Benedict
PMTCT	Prevention of Mother-to-Child Transmission
PPP	Public Private Partnership
RCH	Reproductive and Child Health
RMO	Regional Medical Officer
RRH	Regional Referral Hospital
TB	Tuberculosis
VAT	Value Added Tax
VIA	Visual Inspection with Acetic Acid
WEBERP	Web Based Enterprise Resources Planning

1. Introduction

St. Walburg's Hospital Nyangao is a Faith Based Hospital (FBH) situated in Lindi District, Lindi Region. The hospital is owned by the Bishop Catholic Diocese of Lindi, the Right Reverend Bruno P. Ngonyani. Early 2021, the hospital renewed its agreement with Mtama District Council to provide specific medical services to its community for the next 3 years. The hospital has been enjoying the support by the Missionary Benedictine Sisters of Tutzing, Germany, the Government of Tanzania, friends of the hospital and esteemed partners.

In 1947 a small dispensary was opened at Nyangao. In 1959 Sister Doctor Tekla Stinnesbeck 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. Currently, the hospital has a capacity of 220 beds. Services provided include health promotion, preventive, curative, rehabilitative and palliative services. A Care and Treatment Centre (CTC) was established in 2005 and cares for HIV/AIDS patients and PMTCT.

1.1 Vision, Mission and Core Values

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

1.2 Catchment area & population

St. Walburg's Hospital Nyangao is situated on the hills of the Nyangao village, north to the border between Lindi and Mtwara regions. Lindi region is surrounded by six other districts, all combined have an estimated a total of 900,000 inhabitants (2012 census). Other satellite health facilities under the Catholic Diocese of Lindi are mission hospitals in Mnero and Kipatimu as well as a health center at Mtua Longa. Despite the presence of other hospitals our hospital's coverage is beyond Lindi and Mtwara regions. Our operations cover the east-southern zone of Tanzania between Kilwa and the border of Mozambique. The hospital receives patients from Mozambique. This implies that even if the hospital acquires necessary resources at regional level, it still needs

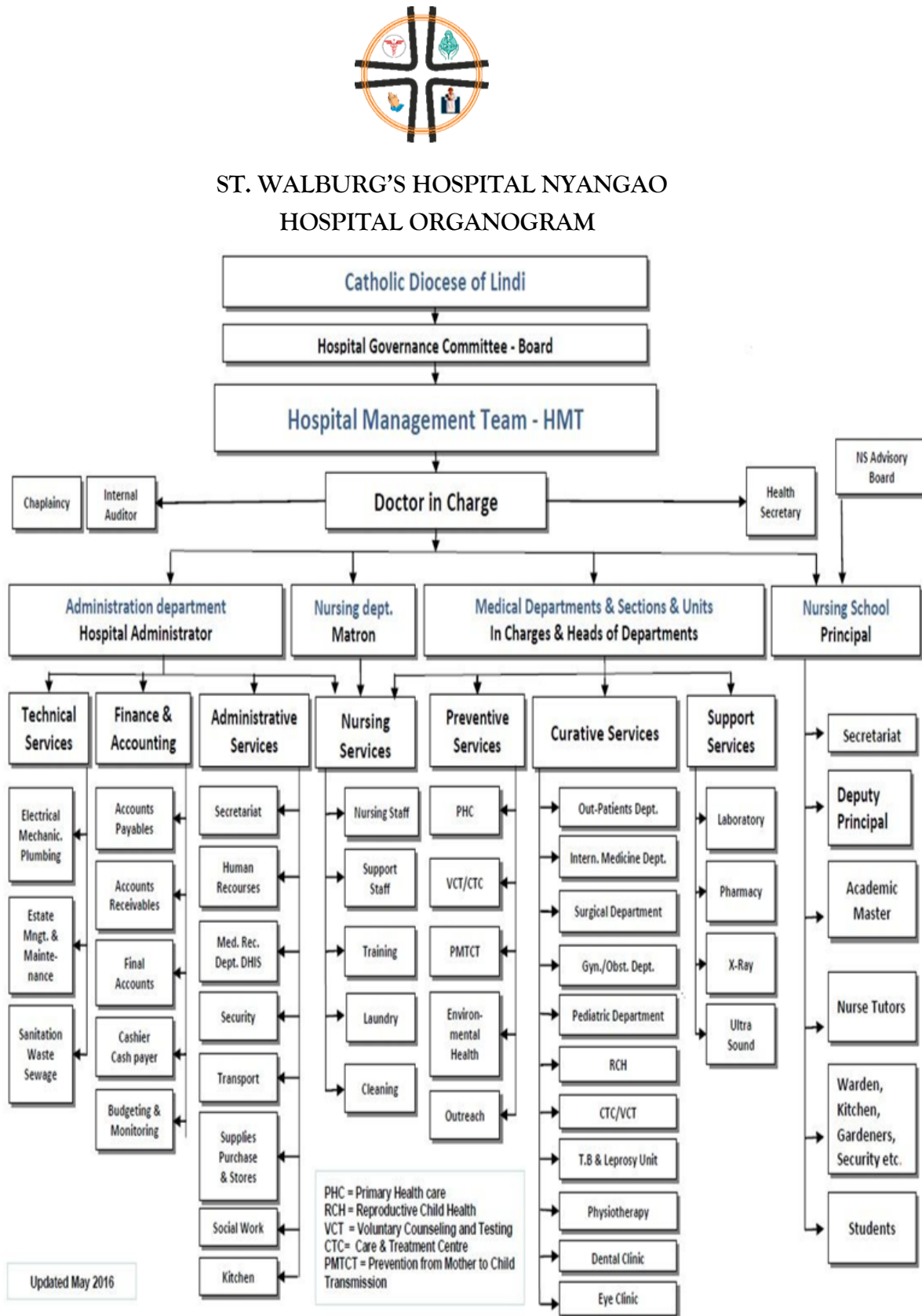
more resources to meet the growing health service demand. Nyangao hospital is estimated to serve a population of around two million people.

1.3 Hospital Governance

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

S/N	Members		
	Name	Role	Position
1.	Fr. Angelus Chitanda	Chairman	Vicar General
2.	Dr. Masanja Kasoga	Secretary	Medical Officer In-Charge
3.	Mr. Theophil Mrope	Member	Diocesan Health Secretary
4.	Sr. Raphaela Mbwilo, OSB	Member	MBS Representative
5.	Fr. George Mwiru	Member	Diocesan Treasurer
6.	Br. Dr. Jesaja Michael Sienz, OSB	Member	Medical Officer In-charge, Ndanda RRH
7.	Ms. Stephania Msangawale	Member	District Economist
8.	Mr. Evaristo J. Mnguli	Member	Community representative
9.	Ms. Faraja Kilewa	Member	Hospital Matron
10.	Dr. Dismas Masulubu	Member	District Medical Officer, Lindi DC
11.	Dr. Kheri Kagya	Member	Regional Medical Officer, Lindi
12.	Mr. Mohamed Babu	Member	Ward Council representative
13.	Mr. Charles Laiser	Invitee	Hospital Administrator
14.	Ms. Happy Mrope	Invitee	Hospital Health Secretary
15.	Ms. Hawa Mnalipa	Invitee	Hospital Accountant

Chart 1: Hospital Organogram Structure



2. Summary

In 2021 the hospital continued to improve the quality of health services delivery. The Covid -19 pandemic threatened our services due to scarcity and high prices of commodities, medicines and medical supplies. Nevertheless, there was an increase in number of outpatients (76,273 vs 73909) with relatively a smaller number of inpatients (7832 vs 8771) compared to previous years (2021 vs 2020 respectively).

The Government of Tanzania through public private partnership (PPP) continued to emphasize on quality of health care with compliances to standards. The Government continues to support human resources, financial resources through health basket fund, capacity building, medicines and medical supplies. Also, the government provides regular clinical audits, mentorship and supportive supervision on medicine and medical supplies.

The visitation by the honorable MP Kassim Majaliwa Majaliwa, the Prime Minister of the United Republic of Tanzania at our hospital has capitalized on our mutual understanding, trust and collaboration with the government in the provision of intended services to its people of the south. Nyangao hospital adheres to the country's health policies.

The hospital continued to strengthen the cooperation with its reputable stakeholder Artemed Foundation, Germany, who supported the projects aiming at stabilization of power and ICT Infrastructure. Due to the Covid 19 pandemic these projects were accomplished late. Artemed foundation also extended their support to medicines, medical equipment and supplies. Through their support we purchased a new X-ray, and C-Arm machine for orthopedic interventions. Also, they sponsored scholarships for short- and long-term trainings in different health specialties. The nutrition project was introduced and is supported in full by the foundation, providing healthy diet counselling to the poor in our hospital and the surrounding communities.

The Missionary Benedictine Sisters (MBS) supported the running cost of nursing school and provided study loans for students. In addition, MBS supported the improvement of the nursing school's infrastructure by constructing the administration building, a new classroom and a kitchen store. They also supported costs of medical care services to the poor and the vulnerable groups including children and pregnant women.

The Polish Medical Mission (PMM) continued with project "improvement of the quality of surgical treatment and mother and child care in Lindi and Mtwara, Tanzania". During the year they supported medical equipment's and various trainings, facilitated in raising awareness on gender-based violence and renovating the RCH and Pregnant mothers waiting area.

Boresha Afya through USAID funding continued to support TB and HIV/AIDS services through capacity building, supportive supervision and ensured availability of essential commodities and equipment's, PPM for laboratory equipment, facilitated sample transportation and processing, mentorship and capacitate CTC staff on data collection and reporting.

Through the collaboration with Muhimbili Orthopedic Institute (MOI), trauma patients easily accessed specialized orthopedic and trauma services. The majority of which were vulnerable and poor patients who would not have been able to afford to travel to specialized hospitals mostly

found in urban areas (the nearest hospital is 532km i.e. MOI in Dar es Salaam). By the end of the year a total of 611 major operations were performed by visiting 24 orthopedic surgeons. This strategy has made it possible to decentralize specialized services to remote rural areas.

The hospital was able to engage medical specialists thereby improving the quality of health care services delivery. In collaboration with the government the following specialized services were made available to our patients; Internal medicine, Cardiology, ENT, Obstetric and gynecologist, Orthopedics, Paediatrics and general Surgery. This has made the hospital qualify as a training ground for intern doctors, increase efficiency and attain the operational status of a regional referral hospital.

The completion of the project improving the ICT infrastructure and power stabilization, supported by the Artemed Foundation, laid the basis for the installation of electronic health management information system, eHMIS (CareMD). CareMD has significantly enhanced utilization of resources, reducing turnaround time for patients, improved patient record- keeping, confidentiality, quality of data, easy and quick retrieval of patient information, better decision making and reduced stationery costs.

We thank and appreciate the support and commitments of all staffs, the Catholic Diocese of Lindi, the Central and Local government authorities, Stakeholders/Partners, and all Friends of the hospital for their support. May God bless you all.



Picture: Patients waiting services at OPD

3. General Statistics overview 2021

Subject	2020	2021
Total Number of Outpatient	73909	76273
Total Number of Inpatients/Admitted	8771	7832
Total Number of Insured Patients	19309	22175
Total Number of Outpatients in Mobile Clinics	3727	3587
Daily Average of Outpatients	202	302
RCH - Under-Five	16754	14732
Vaccinations (all MCH Clinics)	11970	10151
Antenatal attendances at Mobile clinics	477	413
RCH- Under five at mobile clinics	3256	3274
Total number of beds available	220	220
Average length of stay in days	3	3
Admissions in private ward	529	434
Bed occupancy rate	36%	34%
Number of deaths	299	333
Mortality rate	3.4%	4.1%
Minor theatre procedures	2553	2417
Major theatre operations	1827	1554
Deliveries	2321	2417
TB Diagnosis	1414	327
Eye Clinic	579	732
Number of patients enrolled in HIV care	154	139
Total number of clients enrolled CTC	24976	25041

Number of HIV tested HIV tested positive	153	136
Laboratory Examinations	58075	76421
Blood Transfusions	5353	5718
X- rays	5452	8796
Ultrasounds	2152	4433
Total attendance dental unit	1708	1365
Total Hospital Employees	217	236

4. Finance Department

During the year 2021 the department engaged in meticulous control and monitoring of hospital funds with the introduction of electronic health care management information system (CareMD together with Inventory and financial management system (WebErp) for efficient and effective financial Management.

Sources of Income:

The main sources of hospital income are patient user fee (cost sharing), Tanzania Government support, Donations and Insurance schemes i.e. NHIF, NSSF etc.

The hospital income from cost sharing has increased tremendously with improve in the quality of our services through improved customer care, diagnostic services, specialized services, improved infrastructure and reduced turnaround time.

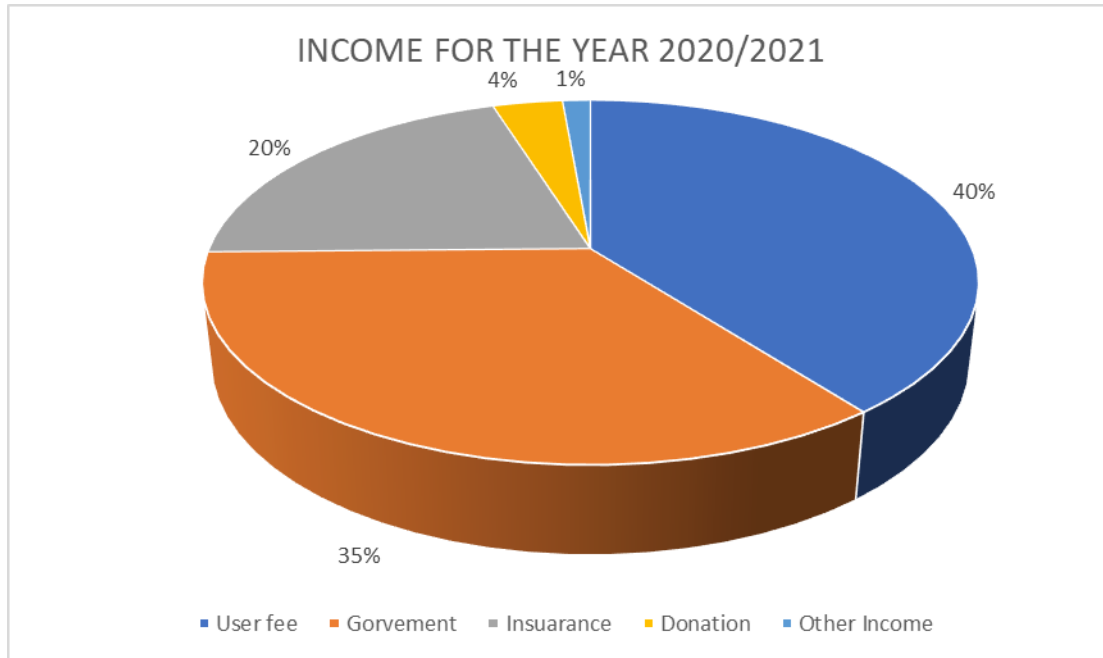
Also, income from insurance schemes has increased with the larger number of insured patients attending at our hospital due to good reputation, customer care and community awareness and knowledgeable on the importance and benefit of enrollment to insurance schemes.

Donor support for medicines and medical supplies also, for the improvement of infrastructures, new and replacements of medical equipment, supply of IT equipment, equipment and materials for the stability of electricity, provision of scholarships funds and many other countless such significant support has relieved the hospital of financial burden.

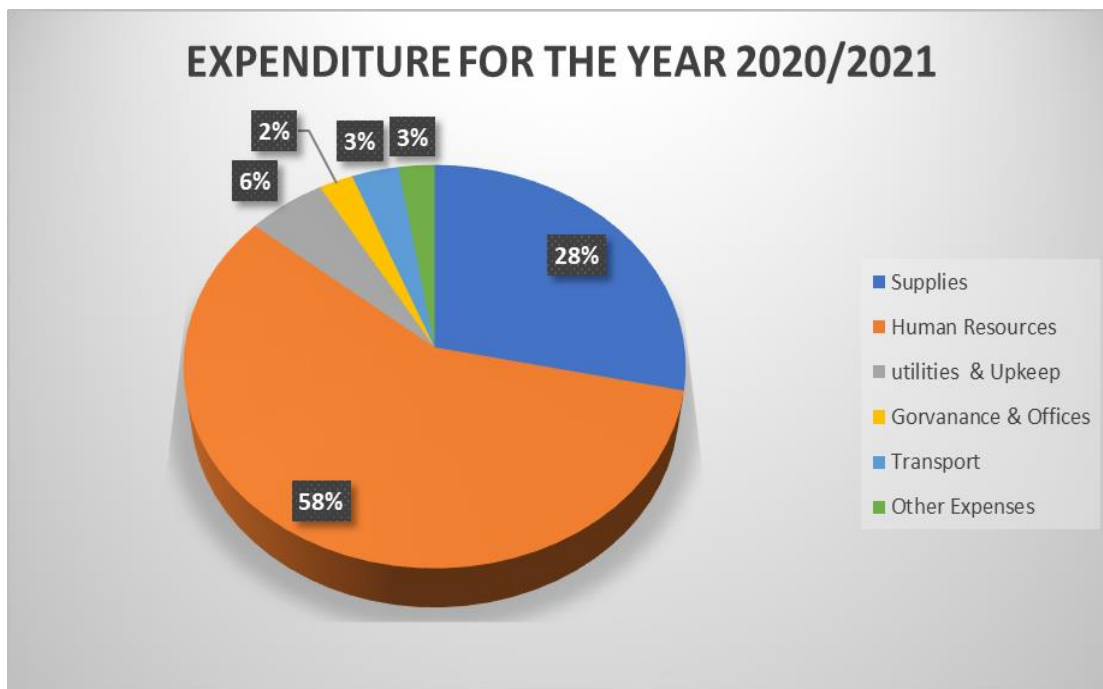
Government support through personal emolument, medicines and medical supplies through MSD, Interns allowance and VAT exemptions greatly supported the financial status of the hospital making it possible to pursue other developmental milestones.

Please, refer to pie charts summary below:

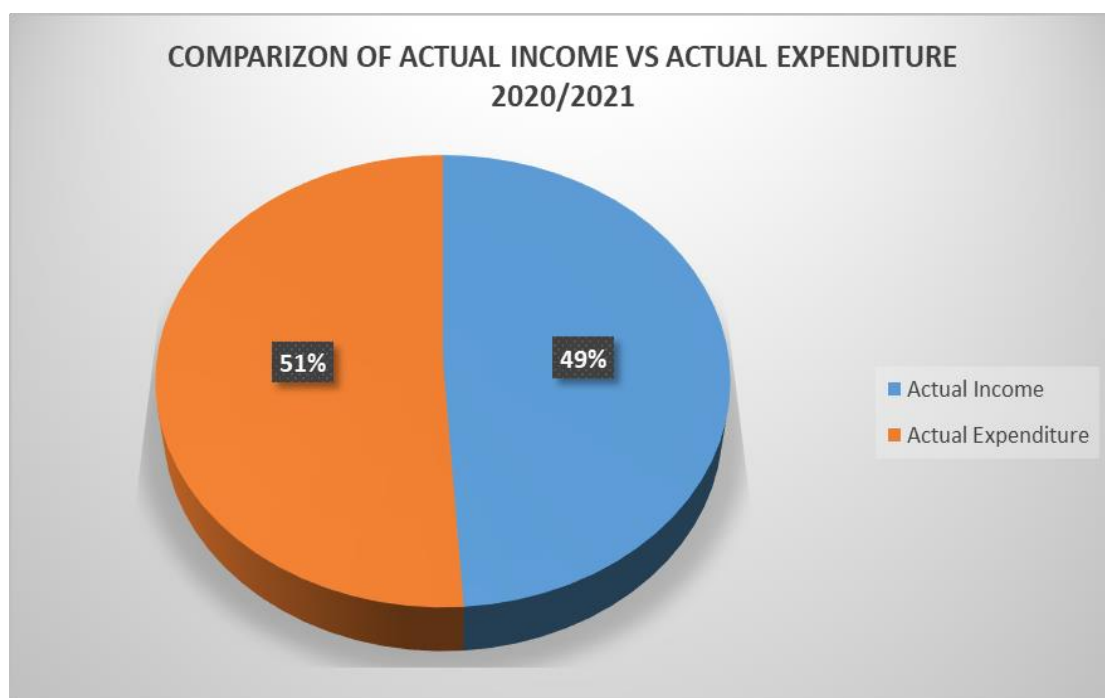
Pie Chart 1: Income Sources 2020/2021



Pie Chart 2: Summary Expenditure Report 2020/2021



Pie Chart 3: Comparison of actual Income vs Expenditure 2020/2021



5. Human Resources

Employment status:

There were 236 staffs with the following categories;

- 90 staffs employed and paid by the hospital.
- 82 staffs employed by hospital and paid salary by government.
- 1 staff seconded by MOH.
- 34 staffs seconded by DED-Mtama.
- 4 staffs seconded by RAS-Lindi.
- 1 staff seconded by Lindi Municipal Council.
- 24 staffs on volunteering basis (volunteers).

Long-term Training:

Eight (8) Staffs went for further training in various institutions as follows:

1. Dr. Francis Msagati; 3 years master's degree in Medicine, MMED Internal Medicine at Muhimbili University of Health and Allied Science (MUHAS) expected to complete in 2023. Sponsored by Artemed Foundation
2. Dr. John Martin Mtomo: 3 years Master's degree in Medicine, MMED Orthopaedics and Trauma at Catholic University of Health and Allied Science (CUHAS) Bugando expected to complete by 2024. Sponsored by Artemed Foundation
3. Mr. Sospeter Nyagabona; 4 years' degree in Nursing at Bugema University in Uganda Sponsored by Artemed Foundation expected to complete by 2022.

4. Ms. Bonitha Kapungu (Medical Attendant); 3 years Diploma in Nursing at Sr. Dr. Teckla Nursing School Nyangao under self-sponsorship and expected to complete by 2022.
5. Ms. Domina Mugyabuso; 4 years' degree in Nursing at St. Augustine University under self-sponsorship expected to complete by 2022.
6. Ms. Miriam Sales Chilumba (Nurse) taking 1 year upgrading course of Diploma in Nursing at Sr. Dr. Teckla School of Nursing-Nyangao under Self-sponsorship expected to complete by 2022.
7. Charles Ally Kondo (Nurse) taking 1 year upgrading course of Diploma in Nursing at Sr. Dr. Teckla School of Nursing-Nyangao under Self-Sponsorship expected to complete by 2022.
8. Craft Ditrick Ng'itu (Assistant Nursing Officer) taking 4 years' Bachelor of Nursing at KCMC under Self-Sponsorship expected to complete by 2024.

Short-term and on job - training:

- 2 Nurses were trained on critical care and emergency care for 2 weeks at MUHAS under Artemed Foundation sponsorship.

Staff Recruitment:

A total of 19 staff were employed under hospital payroll as follows:

- 4 Nurses.
- 2 Assistant nursing officers and 1 assistant nursing officer (anesthetist).
- 4 Health assistants.
- 1 Radiographer.
- 2 Laboratory technologists.
- 1 Assistant laboratory technologist.
- 1 Nutrition coordinator- nutrition project Artemed Foundation support.
- 1 Security guard, 1 pharmaceutical dispenser.
- 1 Attendant (cleaner).

Staff secondment/attached:

9 Staff were seconded temporarily by District Executive Officer (DED)- Mtama while waiting for finalizing construction of their facilities as follows;

- 2 Medical Doctors
- 2 Assistant Laboratory Technologists
- 1 Radiographer
- 1 Anesthetist (Clinical Officer)
- 1 Nursing Officer and 1 Nurse
- 1 Clinical Psychiatrist

Internship:

- Hospital had a total of 22 Intern Doctors up to December 2021 from 2 intakes, 2021/2022.

Staff Turnover:

A total of 13 Staffs left the hospital for different reasons as follows;

- 3 Nurses- Resignation on Government posts
- 2 Nurses-1 end-contract and 1 Resignation
- 1 Assistant Nursing Officer-Deceased
- 2 Assistant Laboratory Technologist-1 resignation on Government post and 1 retirement on severe sickness
- 2 Health Assistants-1 end-contract and 1 Deceased
- 1 Records Management Assistant-End contract
- 1 Security Guard-Deceased
- 1 Attendant (Cleaner)-Compulsory Retirement

6. Curative Services

Table 2: Top 10 diseases in 2021

	Diagnosis	2020	2021
1.	Hypertension	3877	3344
2.	Malaria	3174	2755
3.	Fractures	2131	2562
4.	Other surgical conditions	2299	2070
5.	Upper respiratory infections	2866	1884
6.	Urinary tract infections	2069	1467
7.	Cardiovascular diseases	1467	1372
8.	Peptic ulcer disease	*	1172
9.	Pneumonia	*	1027
10.	Gynaecological diseases	1453	1009

* In 2020 not in the list of top ten diseases

Hypertension in 2021 again is the leading diagnosis in our hospital. Cardiovascular diseases and their risk factors are on the raise, which call upon the hospital to initiate prevention programs to increase awareness in the community in order to prevent their complications.

Malaria and trauma are among the leading conditions for the outpatient attendances and inpatient admissions. There is still a need to educate the public on preventive measures for malaria infection in our community including interval fumigation and clearing bushes in residential areas. The hospital guarantees the continuation of specialized orthopedics services at our hospital bringing closer services to the needy. Costs include transport, meals and accommodations and procurement of implants, equipment and machines. Either, it is high time for the hospital to invest in

endoscopic diagnostics such as Oesophago-gastro-duodenoscopy (OGD) in order to do fair to GIT conditions.

6.1. Reproductive and Child Health Services

The reproductive and child health (RCH) department provides antenatal care services including prevention of mother to child transmission of HIV and care for under-five children. 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 mothers in preventive services such as medicines, vaccinations, provision of reproductive health services and education, and advise on family planning. Thanks to Sr Raphaela, these services are now available for free, hence attracting many pregnant women and their under-five children.

The team comprises of a senior registered nurse, health officer, clinical officer, two enrolled nurses and three medical attendants. They conduct two visits every week.

Dominika Kulczyk foundation through PMM supported the renovation of the RCH, and maternity waiting buildings. Also, financed training and awareness on protection of pregnant Women, Prevention of Domestic Violence and Support of Women's Social Rights.



Picture: Renovated RCH building (Lt) Women and Children at the Under-five Clinic

6.2. Covid 19 Pandemic

A total of 115 patients were suspected of Covid 19 infection. Out of 51 collected samples, we received results for 36 patients, of which 18 tested positive, 17 tested negative while 1 test was Indeterminate. The hospital continued to sensitize the community and health care workers to vaccinate. Till end of the year a total of 462 were vaccinated (Male 182, Female 279). Vaccines received J&J 380 doses, PFIZER 120 doses, SINOPHARM 190 doses and MODERNA 2010 doses. Only 102 staffs were vaccinated (Male 48, Female 54)

6.3. HIV/AIDS Care and Treatment

In prevention of mother to child transmission (PMTCT) services; all 5440 pregnant women who came for booking at our ANC were counseled and tested, 31 women were found HIV-positive and started on ART.

CTC had cumulative total of 25041 clients in 2021 (24976 clients in 2020) an increase of 1065 clients (4.3%). This is due to increase testing in PITC and CITC. Number of newly tested clients who started ARVs in the year 2021 were 154 (156 in 2020).

The hospital in collaboration with Government through USAID-boresha afya continued with cervical cancer screening through visual inspection with acetic acid (VIA) for the purpose of early detection and prevention of cervical cancer. These services initially targeted HIV clients and were later extended to all women above the age of 30. A total of 566 women were screened (322 in 2020) 6 women were suspected of cervical dysplasia (18 in 2020) and treated with Cryotherapy.

6.4. Dental Unit

Dental clinic registered 1389 patients in 2021 (1743 in 2020), the decrease is due to introduction of primary dental care services in health centers and dispensaries by the government. Besides patient care one of the main focal points remains community education on oral hygiene in order to prevent oral morbidity.

Poor dental hygiene can not only lead to caries but can have detrimental effects on health, leading to dental abscesses and possibly progressing into Ludwig's angina- a disease of which we unfortunately still see many patients suffering in our wards.

Table 3: Leading diagnoses in the dental unit

S/N	Diagnosis	2020	2021
1.	Dental caries	155	895
2.	Periodontal abscesses	8	89
3.	Dental abscesses	19	69
4.	Impacted tooth	15	19
5.	Dental flourish	9	7

7. Medical Departments

7.1. Internal Medicine Department

In the department of Internal Medicine, led by a physician cardiologist, in the past few years we have noticed an increase in non-communicable diseases. Where in past times infectious diseases such as HIV/AIDS and TB were more prevalent, our physicians now see more and more non-communicable diseases such as hypertension, diabetes, other cardiovascular diseases and complications thereof. One of the infectious diseases we do still see in abundance is malaria, of which the prevalence does not seem to decrease.

The department runs a clinic for non-communicable diseases two times a week, with an average of 50 patients per week. Diagnostics such as ECG and cardiac ultrasounds are performed in the department, though the machine which is used for doing cardiac ultrasounds lacks certain important functions such as color doppler and continuous wave, thereby restricting its use.

Outreach services to Ndanda RRH are conducted in collaboration with Ndanda RRH twice weekly.

The department counted a total admission of 7832 patients in 2021 (8771 in 2020) showing a decrease of 939 patients. The average length of stay for in-patient admissions was three days. The bed occupancy rate reached was 34% (36% in 2020).

7.2. Pediatric Department

The Pediatric department is responsible for patients under the age of 15. The unit has clinics for under-five children which are conducted at RCH and provides outreach services to three villages for vaccination, health education and diagnosis and treatment. The inpatient services 35 beds and total of 1264 patients were admitted in 2021 (1395 in 2020).

In the year 2021 an exchange program has been initiated between our facility and Ndanda RRH, in which our cardiologist and ENT surgeon worked in Ndanda for two days a week and the Ndanda RRH pediatricians strengthened our pediatric team for two days a week.

It has been government policy for years to provide free medical services to under-five children, which has been a source of financial struggle for our facility. The support by the Missionary Benedictine Sisters Tutzing and Missio has made it easy for the hospital to provide adequate services to these poor children.

Table 4: List of Top 5 medical and surgical diagnosis on admission in the pediatric ward

Diagnoses medical		
1	Malaria	351
2	Diarrhea	155
3	Pneumonia	75
4	Anemia	52
5	Malnutrition	18

Diagnoses surgical		
1	Fracture	72
2	Burn	11
3	Osteomyelitis	6
4	Poison	3
5	Animal bites	2

7.2.1. Nutrition

The hospital in collaboration with Artemed Foundation introduced the project ‘Community Approaches to Address Childhood Undernutrition in Nyangao villages namely Nyangao A, Nyangao B, Mahiwa, Litingi and Mtakuja at Mtama, Lindi Region’. The project aims at increasing the knowledge of mothers and caregivers on the importance of complimentary feeding, breastfeeding, food preparation, frequency, amount and types of feeding so as to maintain a good health status for their children.

The community is also counselled on the importance of breast milk in a child’s diet up two years. Breast milk provides half or more of the child’s nutritional needs from 6-12 months and at least one-third of their nutritional needs from 12-24 months of age. Apart from providing nutritional needs, breastfeeding continues to provide protection to the child against many illnesses and provides closeness and contact that helps psychological development.



Picture 3: One malnourished child on the left and a Nutrition session to a group of women by hospital nutritionist and public health specialist, Ms Geni Mabelya on the right

7.3. Obstetrics & Gynecology Department

The department of obstetrics and gynaecology is headed by an obstetrician and gynecologist, who works with 3 medical doctors and 13 nurse midwives. The obstetric part of the department supervises both healthy and complicated pregnancies and deliveries, whilst gynaecological patients include women with problems in the reproductive system such as cervical cancer, uterine myoma's, sexually transmitted infections, miscarriages, ectopic pregnancies and infertility.

In 2021 we were fortunate to receive 3 MOYO's, devices which can be used to continuously monitor fetal heart rate during labour. Such continuous monitoring is advised in high risk pregnancies such as pregnancies complicated by hypertensive diseases in pregnancy, IUGR, post maturity etc., thus increasing the safety of delivery.

We continuously strive to improve and maintain the knowledge and skills of our obstetric team. Doctors, midwives, nurses from the ante- and post-natal ward and RCH are provided with weekly trainings in which the focus lies primarily on practical skills. Improving teamwork and stimulating self-awareness are essential in the management of obstetric and gynaecological emergencies.

Teams of experts from Germany and Poland visited in 2021. This fruitful exchange of expertise led to several adjustments in our care for some highly complex gynaecological and obstetric conditions, such as infertility. We look forward to future collaboration in terms of exchange of expertise, knowledge and equipment.

7.3.1. Neonatal Intensive Care Unit

In the NICU intensive care for neonates is provided. The main causes for admission to this ward are (early onset) neonatal sepsis, prematurity/ low birth weight and asphyxia. Congenital abnormalities are another – though less common- cause for admission.

On a yearly basis around 560 patients are admitted in St. Walburg Hospitals' NICU. The NICU receives patients from our own labour ward, but also acts as a referral centre for the surrounding hospitals and dispensaries in the Lindi and Mtwara region.

We see that birth asphyxia and prematurity/low birth weight account for the majority of the neonatal deaths in both our hospital and our region, which highlights the fact that in order to reduce neonatal deaths we should focus on strategies to prevent preterm labour and to improve fetal monitoring in order to prevent birth asphyxia.

Table 5: General statistics of NICU 2021

NICU	2020	2021
Babies admitted	477	564
Number of deaths	60	56
Mortality rate	13%	10%
Bed occupancy	92%	99%

Table 6: Common diagnosis on admission in NICU

Diagnosis	2021
Neonatal sepsis	178
Prematurity/Low birth weight	157
Asphyxia	77
Other	152
Total	564

7.3.2 Labour ward

The labour ward recorded 2163 deliveries in the year 2021 (2321 in 2020). Of these deliveries, 74% were by normal delivery while 26% were born by caesarean section. The total maternal death was 4 in 2021 (6 in 2020) the causes being eclampsia, post-partum haemorrhage (2), and one case of pulmonary embolism.

The Maternal and Perinatal Death Surveillance Response (MPDSR) team reviews all maternal and neonatal deaths and near misses with the aim to assess for areas of improvement and to take appropriate interventions to prevent recurrence.

In order to improve the pregnancy outcomes for both mothers and their newborn babies, we reinitiated the Nyangao Hospital's Perinatal Outreach Program (NHPOP), which provides mentorship, supportive supervision and consultative services to perinatal care providers around Mtama area, in Lindi and Mtwara regions.



Picture 4: Newborn babies receiving care at NICU

7.4 Surgical Department

The department of surgery is headed by the general surgeon, who works with two medical doctors, one ENT specialist and orthopaedic surgeons from MOI. The department in 2021 conducted 2417 (2553 in 2020) major operations. We offer out patient services for consultation, investigations and minor procedures. In minor theatre 1554 procedures were performed (1824 in 2020).

We offer high standard surgical care in general surgery, urology, plastic surgery, orthopedics and ENT. Cooperation with MOI continues to be of great value to the people of the Southern region, who would have otherwise had to travel long distances (530 km) to obtain these services. Traffic accidents remain the number one cause of orthopedic attendances in our hospital, followed by falls from height (coconut trees) and animal bites (crocodile).

Table 7: Top 10 most common surgical procedures in 2021

S/N	Type of Operation	2020	2021
1	Caesarian Section	518	528
2	ORIF	210	521
3	Hernias	178	145
4	Lipoma & tumors excisions	82	93
5	External Fixation	82	90
6	Laparotomy	146	90
7	Surgical debridement	78	72
8	TAH and STAH	134	65
9	ENT procedures	50	45
10	Amputations	46	45

Table 8: Other procedures done by OT surgeons

S/N	Type of Operation	2020	2021
1	Nail removal	30	30
2	Ankle reconstruction	10	25
3	Bone cement	1	1

Table 9: Other surgical procedures

S/N	Type of Operation	2020	2021
1	Open prostatectomy	22	25
2	Hydrocelectomy	43	22
3	Orchidectomy	15	12
4	TVH	8	12
5	Modified breast mastectomy	14	10
6	Thyroidectomy	14	9
7	Appendectomy	6	7
8	Lumpectomy	20	6
9	Fistulectomy	13	6
10	Polypectomy	8	3

The department hosted a team of experts from Artemed Foundation on the field of hygiene and theatre management, who improved the quality and safety of our procedures.



Picture 5: Working with new anaesthesia machine (Lt)

7.4.1 Anaesthesia unit

The unit consists of a total of 5 qualified anesthesia nurses and three nurses who are training on the job. Providing safe anesthesia continues to be the top priority, in both general and regional anesthesia. Furthermore, the staff supports the minor theatre, the ICU, NICU, labour ward and other emergency services with regard to difficult cannulation, airway management and pain relief.

Dr. Daniela Kietzmann, consultant anaesthesiologist from Sweden continues to support and train staff working in the department. Missionary Benedictine Sisters through Sr Raphaela supported the hospital with a new anesthesia machine. Artemed foundation has supplied us with several oxygen machines, patient monitors and surgical equipment.

Table 10: Type of Anaesthesia

Type of anaesthesia	Major Theatre	Minor Theatre	Delivery Room	Total
Spinal	995	0	0	995
Short GA	623	160	47	830
GA with intubation	619	10	0	629
Local	63	120	23	206
GA with LMA	97	0	0	97
Total	2397	290	70	2757

8. Supporting Departments

8.1. Laboratory

The laboratory is recognized as a level II regional referral hospital, comprising of 6 sections: serology, microbiology, clinical chemistry, blood transfusion, parasitology, haematology and phlebotomy.

The unit is composed of fourteen staff members; 5 Laboratory Technologists, 6 Assistant Laboratory Technologists, 2 Medical Attendants and 1 supportive staff. The laboratory is equipped with basic and standard medical laboratory equipment.

The laboratory implements and maintains quality managements system and enrolled to accreditation process in 9 scopes for MRDT, HIV, HBsAg, HCV, Malaria microscopy, gene-expert, sputum microscopy, blood group-ABO and cross-match by 2021. The laboratory is in the process of being accredited by African laboratory society of medical laboratory (ASLM).

A total of 76451 investigations and tests were performed in 2021 compared to 58075 in 2020.

Table 11: Laboratory investigations 2021

Investigations	2020	2021
Haematology	18224	17322
Parasitology	7167	10894
Parasitology MRDT	14768	18516
Serology	4939	5063
Chemistry	6270	16817
Blood transfusion	5353	5718
Bacteriology & Microbiology	1354	2121
Total	58075	76451

8.2. Pharmacy

Pharmacy department is effectively managed by a Pharmacy Technologist who directs five (5) units i.e. Main Pharmacy, Emergency Pharmacy, CTC Pharmacy, RCH Pharmacy and Raphael Pharmacy. The pharmacy attendants dispense medicines and medical supplies to patients on a daily basis, 24 hours, seven days a week.

In 2021, the unit continued to conduct yearly pharmaceutical trainings to hospital staffs working in the department and staffs from neighboring facilities under the project 'Hospital partnership in collaboration with SoLME' facilitated by an experienced Pharmacist, Mr. Karl Friedrich Steinhausen.

Table 12: List of most prescribed medicines in 2021

S/N	Medicine
1.	Paracetamol tablets 500mg
2.	Amoxicillin capsules 250mg
3.	Amlodipine 10g
4.	Losartan 50mg
5.	Pregabalin 75mg
6.	Aceclofenac 100mg
7.	Frusemide 40mg
8.	Bendroflumethiazide 5mg
9.	Ceftriaxone 1gm
10.	Metronidazole 200mg

Generally, the pharmacy ensures adequate stock of medicines and medical supplies with 95% availability of tracer medicines (5% missing are family planning medicines and medical supplies). Vertical programs medicines and medical supplies were available throughout the year. These includes; ARVs, TB/Leprosy and Antimalarial.



Pictures: 1. Sanitizer dispensers and Learning materials i.e. books supplied by Artemed Foundation (Sr Dr. UllaMariam (Rt) issuing to Sr. Dr. Fausta in-charge of Surgical department).
2. Pharmacy training workshop facilitated by the Pharmacist Mr Fritz (4th at the back from the Lft) financed by SoLME

8.3. Technical Department

The department consists of an IT technician, Biomedical Technician, Plumbers, Electric Technicians, Mechanics and Drivers. Its main role is to perform planned and preventive maintenance at the hospital and to ensure infrastructures are regularly repaired and renovated.

Old plumbing facilities and water storage tanks remain a challenge to the unit. However, plans are underway to construct a new water tank, overhauling pipe system for the whole network and provide a backup borehole.

Providing a stable source of energy and a power backup system remain the primary goals for our dear Artemed Foundation friends partnering with the Missionary Benedictine Sisters of Tutzing, Germany. Phase one of installing a power backup battery system is complete, what remains is the purchase of a replacement generator, overhauling rewiring for the whole facility and installation of solar power backup.

Major activities/tasks performed were:

- Installation of x-ray and C-arm machines
- Installation of the ICT and electrical equipment by with Artemed Foundation engineers.
- Renovation and repair of water and sewage system infrastructures.
- Construction of teacher's office, classroom and store at the Nursing school
- Restoration and repair of broken old borehole.
- Renovation of X-ray room for installation of the New X-ray machine.
- Establish and equip standard mortuary building.



***Pictures:** Fr. Angelus Chitanda (Vicar General) first from the right in blue t-shirt 4th picture on lower line following closely the progress of Water crises intervention due to fault in the Old borehole*

8.4. Buildings

8.4.1. Mortuary

The government through Mtama Council supported our hospital with a standard 6 bodies mortuary cooler cabinet. Our hospital now provides proper care for the dead, a service which has been missing for many decades.



Picture: Inauguration of the renovated and equipped Mortuary building. From Left first row Ward Councilor-Hon. Mohammed Babu, District Ruling Party Chairman-Mr. Ongonyoko, Hon. Shaibu Ndemanga-DC Lindi, Bishop Bruno Ngonyani-Catholic diocese of Lindi, Dr. Dismas Masulubu-DMO Mtama, Mr. Theophil Mrope-Diocesan Health Secretary

8.4.2. RCH and Pregnant Women Waiting buildings

The Renovation of the RCH building and Pregnant women waiting area was done with the support of PMM thanks to Dominika Kulczyk foundation. On average there are 5 pregnant women awaiting delivery in this unit due to challenging geographical locations at the area of their dominance.



Picture: Pregnant women waiting home renovated through the support of Kulczyk Foundation

8.5. Electricity

In 2021, the project revising the electricity and ICT infrastructure in our hospital was finally accomplished by our esteemed German partner, the Artemed Foundation, after delays due to the global pandemic of Covid 19 disease. This project has ensured the hospital of reliable electricity and ICT infrastructure thus making it possible to install the eHMIS (CareMD).



Picture: Installation of ICT and Electric Power stabilization system by Artemed Foundations engineers

8.6. Hospital Management Information system (HMIS)

The hospital acquired an electronic health management information system, eHMIS from OSTECH Ltd called CareMD. CareMD has enhanced proper utilization of resources, reducing turnaround time for patients. The improved ICT infrastructure (the modern server) and electricity (battery backup) have significantly improved the quality of hospital services delivery.

The installation of patient care information system has improved patient record- keeping, confidentiality, quality of data, documentation, easy and quick retrieval of patient information and reduces stationery costs.



Picture: ICT and Electricity infrastructure donated by Artemed Foundation

8.7. Radiology Unit

The radiology unit is run by two radiographers assisted by 1 medical attendant. Despite recurrent service interruption due to frequent breakdowns of the old X-ray machine, a total of 8796 X-rays were done in 2021 (5452 in 2020).

Thanks to Artemed Foundation, who supported the hospital with a new X-ray and C-arm machine, we are able to continue providing quality care to our patients. Imaging studies remain vital in reaching adequate diagnosis and treatment plans for patients with trauma, communicable and non-communicable diseases alike. The people of Southern Tanzania will forever be grateful to you for this huge support.



8.8. Pastoral and Social Welfare

St. Walburg's Hospital Nyangao is a Catholic hospital which holds the Christian values of love, compassion, respect, integrity and excellence to its core. We aim to provide high quality services to both the rich and the poor. As is written in Luke 10, verse 9: 'Cure the sick and tell them: the reign of God is at hand.'

In the rural southern part of Tanzania where we are based, many people do not have health insurance and therefore unexpected medical expenses can have detrimental effects on a households' financial situation. The department of pastoral and social welfare is tasked to identify those in need and provide them with exemption and social support. For Jesus delivers the needy when they call, the poor and those who have no helper. He has pity on the weak and the needy and saves the lives of the needy (Psalm 72:12-14).

Providing spiritual guidance to patients and employees alike is central to the pastoral services. The hospital finds it essential to create a suitable environment for the sick, enabling them to reconcile with their creator when the time has come.



*Picture: Bishop Bruno P. Ngonyani with Sr. Raphaela Haendler, OSB visitation to the patient in wards (Lt)
Sr. Raphaela with the administrator Mr. Laiser in the Chapel (Rt)*



Picture: Dr. Kasoga (MO i/c) and Sr. Raphaela Haendler, OSB meeting with Dr. Anne and Dr. Caroline M.D. from the Netherlands.

8.9. Hospital Garden and Environmental up keep

The hospital is keen to ensure the surroundings are kept clean and that they support infection prevention and control, which is a key role of the hospital. Based on audits by several government and non-government organizations, our hospital's environment was found favorable.

The hospital garden provides fruits and vegetables to both staff and patients in need. It is also an income generating source for the hospital as well as a means to educating the community on the importance of vegetables and fruits for their health and well-being.



Picture: Hospital garden with flourishing pawpaw, bananas, orange and various vegetables

9. Sr. Thekla's Nursing School

Vision

To be an institution of excellence where competent and caring nurses are trained.

Mission

To improve peoples' health by applying the best knowledge, skills and attitude which will enable graduates to work in different and challenging situations as highly skilled health workers.

In 2021 the school had 75 students as follows: -

CLASS	MALES	FEMALES	TOTAL
1 st YEARS	11	9	20
2 ND YEARS	20	21	41
3 RD YEARS	1	3	4
• Ordinary Diploma • Upgrading Diploma	6	4	10
TOTAL	38	37	75

STAFF

Academic staff – Full time Tutors 6, 1 is on long term training (BSc in Nursing), Part Time Tutors 6, Supporting Staff 8.

Theoretical Session: Facilitated in class as scheduled, adhering Curriculum guidelines.

Clinical rotation: Students provided nursing care to patients at St. Walburg's Nyangao Hospital and gained practical experience in the care of patients. 3rd year students had additional clinical rotation at Ligula Psychiatric Unit – Mtwara where they cared for patients with mental disorders.

The students gained experience in the care of patients with mental disorders. Supervision of student was done by teachers and the In-charge of the Unit.

Community Health Field Work: 35, 2nd years students (September Intake), had Community Health Field in 4 villages as follows:-

- Rondo Chiponda – Mtama District Council
- Nyangamara – Mtama District Council
- Nkowe – Ruangwa District Council
- Mbemba – Masasi District Council

6, 2nd year students, (March Intake) had Community Health in Nyangamara Village which is in Mtama District Council.

Students were supervised by teachers and the In-charges of the Rural Health Centre of the Village.

End of Semester Examinations: These were conducted as scheduled according to NACTE ALMANAC following regulation of Supervisory Authorities. The results of the Examination were extremely very good.

Preparation for Accreditation

The school's Full Accreditation Status expires on 29.08.2023. Therefore, measures are started to prepare for the NACTE Verification Visit. An administration block has been constructed by a donation of Missionary Benedictine Sisters through Sr. Raphaela Haendler OSB. Apart from the administrative block, an additional classroom was renovated. We express our sincere gratitude to Sr. Raphaela for this help.



***Picture:** Inauguration of the new administration block, classroom and kitchen store. From the left Ms. Nkane (Principal), Fr. George Mwiru (Diocesan Treasurer), Mr. Charles Laiser (Hospital Administrator), Second picture second from the right Mr Theophil Mrope (Diocesan Health Secretary)*

Renovation: Some areas of the school infrastructure were renovated through the donation of the following:

- Mnero Solidarity
- Fr. Hugo – the former Nyangao Parish Priest

We thank them very much for their support to the school.

10. Remarkable events during the Year 2021

- The visitation by the Prime Minister of the United Republic of Tanzania Hon. MP. Kassim Majaliwa Majaliwa.
- Signing of the service agreement between the hospital and the government for health services provision through Public Private Partnership with Local Government of Mtama District Council.
- Enhanced collaboration with Government through PPP with Mtama DC for the support of human resources, health basket funds and capacity building as per signed service agreement.
- The completion of the project improving the ICT infrastructure and power stabilization, supported by the Artemed Foundation, allowing for the installation of eHMIS.
- Installation of eHMIS by OSTECH ltd, CareMD. CareMD has significantly enhanced utilization of resources, reducing turnaround time for patients. The installation of patient care information system has improved patient record-keeping, confidentiality, quality of data, documentation, easy and quick retrieval of patient information and reduced stationery costs.
- Provision of free health care services to pregnant woman and under five children with the support of the Missionary Benedictine Sisters of Tützing, Germany through Sr. Raphaela OSB.
- Continuation of the memorandum of understanding with MOI to continue providing specialized orthopedic services at our hospital.
- Intern doctors continue to receive their training at our facility.
- Establishment of a modern, standard and well-equipped hospital mortuary through the support from Government and MBS.
- Installation of the new X-ray and the C-Arm machines donated by Artemed Foundation.
- Acquisition of a new anesthesia machine with the support of the Missionary Benedictine Sisters of Tützing, through Sr Raphaela OSB.
- Training of one of our medical doctors in Orthopaedic surgery at Bugando Catholic University of Health and Allied sciences (CUHAS) for 3 years, sponsored by Artemed Foundation.
- We were blessed to receive many visits by friends of the hospital of which we feel the desire to mention especially the parting visit of our longstanding friend and supporter our dear Sr. Raphaela Handler OSB.

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





Get in contact or find more information on our website:

St. Walburg's Hospital Nyangao

P.O. Box 1002 Lindi, Lindi Region, Tanzania

Phone: +255 (0)656 227 511

E-mail: nyangaohospital@gmail.com

Web: [https:// www.nyangaohospital.or.tz](https://www.nyangaohospital.or.tz)

Sr. Dr. Thekla Nyangao School of Nursing

P.O. Box 122 Nyangao, Lindi region, Tanzania

Phone: +255 (0)715 130 019

Email: nyangaonursingschool@gmail.com

Web: <https://www.stnsn.ac.tz>

© 2021 St. Walburg's Hospital Nyangao